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Labour Market Development in the 1980s

A report of the Task Force
on Labour Market Development
prepared for the Minister of
Employment and Immigration
as a contribution to a process
of consultation with provincial
governments and organizations
representing different elements
of the private sector.

July 1981



Employment and
Immigration Canada

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Immigration Canada

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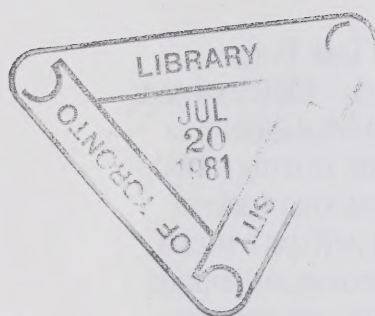
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Foreword

This report is the product of the Task Force on Labour Market Development which was established in July 1980 within the Department of Employment and Immigration to review trends likely to affect Canadian labour markets in the 1980s and to consider the implications for the direction of federal government policies and programs affecting the operation of those markets.

When the Task Force was set up, it was understood that its findings would be made widely available for purposes of consultation with provincial governments and organizations representing different elements of the private sector. That understanding has been maintained.

It follows that the suggestions and proposals contained in the report do not represent the policy of the Government of Canada. Based on analytical work undertaken by the Task Force for the undersigned, they are put forward at this time as a contribution to the process of consultation already mentioned—a process to which the Government is committed.

A handwritten signature in black ink, reading "Lloyd Axworthy". The signature is stylized, with the first name "Lloyd" written in a cursive-like script and the last name "Axworthy" in a more formal, slightly cursive script. There is a small flourish at the end of the last name.

Lloyd Axworthy
Minister of Employment
and Immigration

Contents

Introduction	1
Part One: Goals, Objectives and Changing Economic Conditions	
1. The Nature of Labour Market Goals and the Role of Labour Market Policies	7
The Nature of Unemployment	8
Why Has the Unemployment Rate Drifted Upward over Time?	10
The Trade-off between Inflation and Unemployment	14
The Trade-off between Equity and Efficiency	16
The Role of Labour Market Policy Instruments	17
Conclusions	18
2. Labour Market Conditions in the 1960s and 1970s and the Labour Market Policy Response	19
Recent International Developments	19
Labour Supply Developments in Canada	21
The Industrial and Occupational Composition of Unemployment	23
Developments in Regional Labour Markets	27
The Evolution of Labour Market Policies	30
International Developments	30
Developments in Canada	32
Training Programs	33
Job Creation	34
Conclusions	35
3. The Unemployed in Canada	37
Recent Perceptions of the Unemployment Experience	37
The Nature of Unemployment	39
Concentration	39
Unemployment Rates	40
Demographic Characteristics	41
Seasonal Factors	41
The Hard-Core Unemployed	41
Rural and Urban Differences	42
Conclusions	42
4. Labour Markets in the 1980s	45
Recent and Prospective Economic Developments	47
The Composition of Employment Growth	50
Industrial Composition	51
Occupation Demand	52
Labour Supply Conditions	55
Demography	55
Participation Rates	56
Implications for Labour Force Growth	57
Principal Conclusions of Aggregate Supply and Demand Analysis	59
Employment Opportunities for Men and Women	60

The Regional Pattern of Employment Growth	62
Occupational Imbalances	65
Conclusions	68

Part Two: Policy Directions for the 1980s

5. Providing Labour Market Information and Employment Services	73
Historic Role of the Employment Service	73
1918-1965	73
1966-1980	76
The Public Employment Service: Information and Placement Services	76
Current Performance	77
Services for the 1980s	78
The Public Employment Service: Information and Placement Services	80
Vocational Counselling	80
Employment Counselling	81
Consultative Services	82
Labour Market Intelligence	83
Market Intelligence	84
Institutional Framework	86
Conclusions	87
6. Improving Opportunities for Groups with Special Employment Needs	91
Who Are the Target Groups?	93
Women	93
People of Native Ancestry	95
Urban Centres	96
Resource Development	97
Local Economic Development	97
Disabled Persons	98
Youth	100
Older Workers	101
Implications for Policy	101
Market Mechanisms	102
Job Information and Counselling	103
Employment Support	103
Information Strategies and Research	104
Ensuring a Supply of Target Group Workers	105
Training	105
Influencing the Demand for Target Group Workers	106
Wage Subsidies	106
Affirmative Action	107
Employment Development	109
Encouraging Flexibility	109
Conclusions	110
7. Influencing the Structure of Demand for Labour: Indirect Intervention	113
Nature of the Problem	114
When to Intervene	116
Permanent Employment	116
Temporary Employment	118
Creating vs. Maintaining Employment	119
Some Special Considerations	120
How to Intervene: General Conditions	120
Incentives	121
Restrictions	123

Private Sector Firms as Agents	124
Public Sector Enterprises as Agents	126
How to Intervene: Thin Labour Markets	129
Conclusions	130
8. Influencing the Structure of Demand for Labour: Direct Employment Programs	133
The Development of Job Creation Programs	133
The Target	134
The Impact	135
A Program Framework	139
Employment with/without Development	141
Policy Directions for the 1980s	143
A Community-Based Approach	143
The Development System	145
Canada Community Opportunity Development Corporation	145
Opportunity Development Corporation	145
A Support Network	145
Opportunity Development Bank	146
A Conceptual Framework for the 1980s	146
Conclusions	147
Direct Employment Programs	147
Long-Term Strategies	148
Cyclical Strategies	148
— 9. Training to Meet Skill Needs	151
Training at the Post-Secondary Level	153
Training for the Higher Skill Trades	159
The Outlook	161
The Adequacy of Current Training Arrangements	163
The Federal Government Response	165
Implications for Federal Policy	169
Provisions of Low and Middle Level Skill Training	170
A. Institutional Classroom Training	170
Issues and Concerns	172
Generic Skill Training	172
Educational Leave	172
Academic Upgrading	172
Advisory Councils	173
Technological Change	-173
Policy Implications	173
B. Industrial On-the-Job Training	174
Issues and Concerns	175
Policy Implications	175
Conclusions	176
10. Immigration to Meet Skill Needs	179
Basic Issues for the 1980s	179
Concepts and Terminology	181
Independent Immigrants	181
Assisted Relatives	182
Family Class	182
Refugees	182
Requirements for Foreign Labour	183
Workers Admitted as Permanent Residents	183
Temporary Workers	186
Obtaining the Skills Canada Needs	187

International Competition	187
Management Issues	188
Implications for Policy	189
— 11. Facilitating Labour Adjustment	191
Adjustment Requirements in the 1980s	192
The Built-in Adjustment Capability	192
Down-side Adjustments	195
International Examples	196
Alternative Government Role	196
Up-side Adjustments	198
Conclusions	199
12. Summary and Conclusions	201
Facilitating the Improved Operation of Labour Markets	202
— Influencing the Structure of Demand of Labour	203
— Meeting the Skill Needs of the 1980s	205
Productive Employment for Workers with Special Needs	207
Adjustment and Adaptation	207
Appendices	
A. Evaluation of Economic Impacts of Labour Market Intervention	211
— B. The Levy/Grant Option	221
C. Additional Considerations Regarding the Adult Occupational Training Act	229
Bibliography	237
Technical Studies Commissioned by the Task Force	241
Task Force Members and Staff	243

Introduction

As the last decade came to an end, a number of concerns were being expressed about the contemporary and future characteristics of Canadian labour markets and the framework of government policies designed to influence their operation. The underlying reasons were many and varied, and it is probably true that some could not be articulated with any precision. A few could be clearly identified, however, and these were being stated with increasing force and frequency.

- High rates of unemployment at the national level were persisting but were accompanied to an increasing extent by strong excess demand for certain skills in western Canada.
- The evidence of increasing regional imbalances between supply and demand was compounded by a growing expectation that changing technology and increasing international competition were setting the stage for important shifts in the requirements of individual industries, suggesting significant continuing change in the pattern of occupational demand for labour.
- By the mid-1970s, growth in the labour force had levelled off and was expected to decline.
- Despite this fundamental fact, there was growing recognition of the need for special efforts to absorb into productive employment rapidly growing segments of the labour force, in particular women and Canadians of Native ancestry.
- All of these reasons for concern were being addressed in the context of an uncertain environment characterized by a low rate of growth in the world economy and slow growth of government revenues—an environment in which the cost effectiveness of government policies and programs, including those related to labour market management, was being closely questioned.

In the context of this changing economic environment, it was recognized in the Speech from the Throne of April 1980 that new economic policies would be required to provide jobs, spur growth, improve regional

balance and provide for an equitable distribution of economic opportunity. Labour market policies were seen to be a critical element of a new development strategy. Consequently, Parliament was asked to establish a Special Committee on Employment Opportunities for the 1980s. The Government also established two task forces within the Department of Employment and Immigration—one to examine the unemployment insurance program, the other to assess other federal policies which influence the operation of labour markets. It was envisaged that the reports of these task forces would represent the first step in a process leading ultimately to the redesign of federal labour market policies to meet the needs of the 1980s.

The Task Force on Labour Market Development was given the following terms of reference:

- to provide an overview of labour demand and supply conditions as they are likely to emerge over the next decade, with a view to identifying possible industrial, occupational and skill imbalances;
- to re-examine the concepts of employment, unemployment and labour force participation in light of the changing nature of production processes and lifestyles, and to assess the implications for labour market and employment policies;
- to review and assess the adequacy and cost effectiveness of training programs (both public and private) in meeting the projected requirements for trained manpower, and to investigate policy options for the provision of training services;
- to assess the requirements for net immigration to relieve excess demand for particular skills in the Canadian labour market;
- to assess the effect of employment and placement services, as well as other governmental programs and regulations, on the functioning of labour markets, and to suggest methods of improving information flows and the efficiency with which labour demand and labour supply are matched;

- to examine problems faced by particular groups of individuals in participating fully and effectively in the labour force on a fair and equitable basis, and to suggest policies and programs to assist these groups in realizing their potential;
- to assess the role and impact of job creation programs on employment, output and productivity, and to suggest improved methods of accomplishing the objectives of these programs.

Given the breadth of its mandate and the limited time available for its pursuit, the Task Force relied to the extent possible on analytical work already carried out or being done in federal and provincial government departments. It also sought professional advice and assistance from a variety of non-governmental sources. In a few areas where they were considered both necessary and feasible within the established time frame, outside studies were commissioned. A list of these studies appears at the end of the Report. A collection of summaries of these studies will be published shortly, and the studies will be available from CEIC upon request.

Labour market conditions are influenced to some degree by most economic and social policies at all levels of government. An attempt to cover all of this territory would have made this study an impossible task. It was therefore necessary to establish workable parameters. To do this, six broad sets of assumptions about the framework of government policy in the 1980s were established.

- It was assumed that four major goals would continue to be pursued: economic growth, high levels of employment, price stability, and an equitable distribution of economic opportunity.
- It was assumed that there would be no change in the boundaries of federal and provincial jurisdiction as they pertain to labour markets.
- It was assumed that although immigration would continue to be used for specific purposes, there would be no inclination to utilize this instrument on a large scale as a means of meeting the demand for workers in high-growth industries and regions. This means, of course, that the bulk of this demand will have to be met within Canada, which implies that Canadians will have to be prepared to respond to the opportunities offered by mobility between occupations, industries and regions.
- It was assumed that policy designed to facilitate change in the structure of the economy would have as one of its basic goals an increase in real income per capita in all regions. This, of course, would not require a static regional distribution of either the population or the labour force.

- It was assumed that the current aggregate level of public investment in labour market development, including training in post-secondary education, employment services, employment programs and adjustment assistance, would be maintained in real terms throughout the 1980s. The Task Force did not attempt to determine the optimal overall level of investment in the development of human resources. Rather, it focused on questions of emphasis and relative allocation of expenditure across the range of principal program elements.
- Finally, to limit the complexity of the analysis, it was assumed that there would be no change in policy governing industrial relations, pensions or employee compensation as they relate to the operations of labour markets. The functioning of labour markets is powerfully affected by a number of factors outside the domain of federal policy. Provincial governments have jurisdiction over the education system, including apprenticeship, and over licensing and certification of trades and professions; training is conducted in industry through more-or-less formal processes; labour unions influence conditions of entry and the content of training in many industrial and construction trades; and employers, through hiring and promotion procedures, influence the kinds of people working in different jobs. Wage structures established by employers or through collective bargaining also affect the allocation and use of labour. Given the limited time at its disposal, the Task Force has not examined many of these provincial and private sector practices which impinge on the functioning of the labour market. It has confined its work to those areas that can be influenced by federal policies and programs.

These assumptions collectively imply a view that the role of labour market policies is not primarily to change the total demand for or supply of labour in the economy. Rather, the analysis is based on the premise that the primary role of these policies is to improve the allocation of labour among regions, industries and occupations, and to bring about a more equitable distribution of economic opportunity. Put another way, the primary role of the policies discussed in this Report is to facilitate labour market adjustment to a changing industrial, geographic and occupational mix of economic activity.

In many respects this is the classic role of labour market policies, but the emphasis in the present analysis is somewhat different and more general than that which has characterized most previous studies on the subject. In particular, many discussions of labour market policies suggest implicitly or explicitly that these policies are

concerned only with the reduction of unemployment and the hardship associated with it.

But unemployment is to a large extent just a symptom of badly functioning labour markets. To confine this study to unemployment would be to limit it to an analysis of the symptoms rather than the disease. The Task Force has, therefore, chosen to study the dynamic operation of labour markets and to analyze the impediments to the achievement of higher levels of more productive employment. On the basis of this analysis, set out in Part I of the Report, we then go on in Part II to assess appropriate public policy to remove the impediments to higher levels of employment and greater productivity.

Part I begins in Chapter One with a discussion of the goals of economic and social policy, the nature of the trade-offs between them and the role of labour market policies in promoting the goals and attenuating the trade-offs. Chapter Two reviews the economic environment in Canada in the recent past and briefly discusses the evolution of labour market policies in Canada and abroad. Chapter Three briefly reviews the state of knowledge about the nature and structure of unemployment. Part I concludes with an analysis of the prospects for the 1980s in Chapter Four.

Part II of the Report is devoted to a discussion of the various policy issues.

- Chapter Five discusses the role of the public employment service in providing employment information and counselling services to individuals. It also outlines the requirements for longer-term intelligence about labour market conditions and suggests an institutional mechanism through which such intelligence can be effectively provided in the future.
- Chapter Six sets out the labour market problems of particular target groups and the nature of the policy instruments required to deal with them.
- Chapters Seven and Eight discuss the direct and indirect instruments used by the federal govern-

ment to influence the structure of demand for labour. These instruments span several departments of government and involve many kinds of assistance to business (including tax incentives, tariff protection and subsidies) and various direct employment development programs.

- Chapter Nine deals with the federal role in the training system. It examines the existing federal contribution to training at all levels and, on the basis of estimated future demand for labour, assesses the need for reallocation and redirection of the federal effort.
- Chapter Ten discusses the role of immigration as an instrument of labour market policy.
- A recurring theme is that labour market policies in general contribute to the smoothing of adjustment processes in labour markets. Given the importance of this theme, Chapter Eleven examines in some detail appropriate policy responses to facilitate major adjustments in the labour market.
- Chapter Twelve provides a summary of the principal conclusions and suggested directions for change.

This Report represents only a first step in a process of analysis, consultation, program design, legislation, and implementation. The intended result is a new set of labour market policies designed to meet the needs of the 1980s. Our task has been to provide an assessment of general policy requirements based on an analysis of likely labour market conditions in the 1980s. We have not attempted to assess all existing programs in detail against the objectives for which they were designed. Our directional conclusions are meant to provide a basis for discussion and consultation rather than a precise recipe for change. The planned process of consultation itself is expected to suggest modifications and additional options. Following consultation, a period of intensive work will be required to produce effective program design. Where significant change is required, a phased approach to implementation will undoubtedly prove to be essential.

Part One

Goals, Objectives and Changing Economic Conditions

Chapter One

The Nature of Labour Market Goals and the Role of Labour Market Policies

Commitment to the goal of high employment has been a characteristic of the governments of all industrial societies in the post-war period. In Canada this commitment was stated in the *White Paper on Employment and Income* presented to Parliament in 1945 (Dept. of Reconstruction, 1945), in which the government of the day outlined its policies for reconstructing a peacetime economy. In that document the government stated that:

The central task of reconstruction . . . must be to accomplish a smooth orderly transition from the economic conditions of war to those of peace and to maintain a high and stable level of employment and income. The Government adopts this as a primary object of policy. (p. 1)

The White Paper did not state its commitment in terms of a precise numerical goal. It did, however, mention the concept of “full employment”:

In setting as its aim a high and stable level of employment and income, the Government is not selecting a lower target than “full employment”. Rather, the Government is mindful that employment and incomes will be subject to fluctuations in the sphere of international trade, which cannot be wholly and instantaneously offset, and that seasonal fluctuations, resulting from climate and buying habits, are not to be overcome without much patient and resourceful work. (pp.1-2)

There has been continuing debate and analysis among the public and professional economic communities as to what the numerical value of such a “full employment” goal should be and what policy instruments should be used to attain it. Reflecting the environment in which it was written, the White Paper concentrated on the employment goal. There was no mention of the goal of price stability or of an equitable distribution of income, nor was consideration given to the possibility of conflict among competing objectives.

As the post-war period wore on, it became evident that single-minded pursuit of a goal of low unemployment, although producing significant benefits, also gen-

erated significant costs in the form of higher rates of inflation. Moreover, it was increasingly realized that even in times of low national unemployment, certain regions of the country continued to experience high rates of joblessness and relatively large numbers of people continued to be limited to low levels of income. Government statements of goals and objectives and their policy initiatives began to reflect a desire to ensure a fair distribution of employment opportunities and incomes among people and across regions. It was increasingly realized that this equity objective, like the low unemployment goal, could not be achieved without cost and that there could be conflict between the two objectives of a fairer distribution of income and output and greater efficiency in the production of output.

Related to the elaboration of the goals of social and economic policy, and to the increasing recognition that single-minded pursuit of any one goal would probably conflict with the attainment of others, has been the progressive development of policies and programs to complement the traditional levers of macroeconomic policy to improve our ability to jointly achieve the various goals.

With respect to the labour market, the need became generally recognized in the 1960s for increasing attention to policies designed to improve the functioning of the labour market. Experience over the post-war period showed that while correct macroeconomic policies are necessary to achieve high employment with stable prices, they alone are not sufficient to achieve these two goals simultaneously. Policies are also needed to improve the operation of labour markets by enabling the supply of labour to adjust more rapidly to changing geographical, industrial and occupational demands. Labour market policies are viewed primarily as contributing in the medium term to improved efficiency in the functioning of labour markets, leading to improved ability of the macroeconomic policy levers to achieve low levels of unemployment without adding to inflationary pressure.

Central to an understanding of the medium-term role of labour market policies and of the shorter-run role of macroeconomic policy is an understanding of the nature of unemployment and the concept of “full employment,” as well as an understanding of recent developments in the analysis of the full employment concept.

In this chapter we discuss the nature of unemployment and what economists mean by full employment, and examine the trade-off between price stability and employment objectives. Since equity considerations have figured increasingly in the elaboration of labour market policies since the late 1960s, the nature of the equity/efficiency trade-off is discussed, followed by a general discussion of the role of labour market policies.

The Nature of Unemployment

Although the labour market goal of government is frequently stated officially in terms of high employment, the operative indicator of the extent to which this goal is achieved is usually the unemployment rate. Employment measures alone give no indication of the extent to which the available supply of labour is being used. The unemployment rate is a measure of the number of people unemployed relative to the numbers employed, temporarily laid off or seeking work.

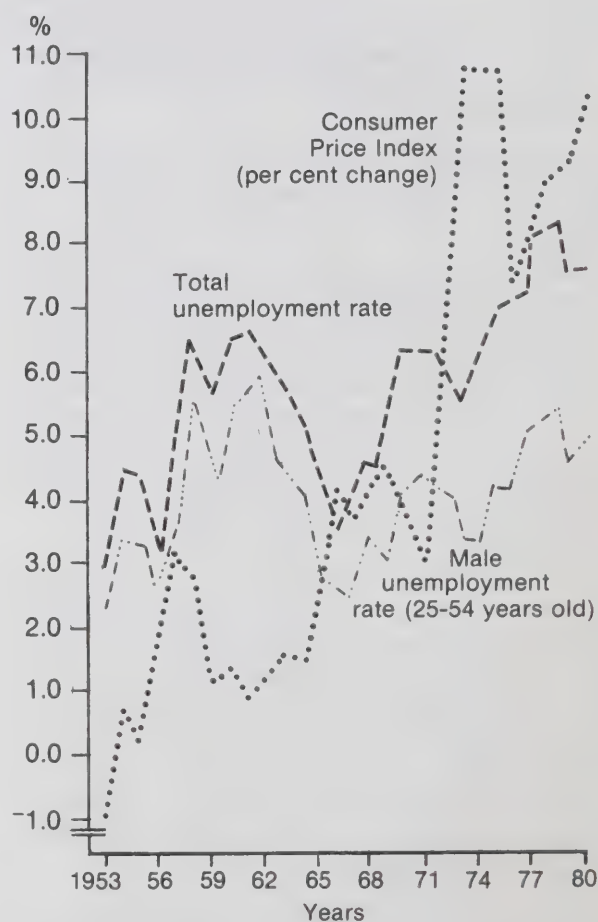
Although the unemployment rate is a reasonable way of translating the high employment goal into an operational concept, it is not without ambiguities as an indicator of the extent to which the high employment objective is being achieved.

- The unemployment rate is a result of the interaction of demand and supply factors in the labour market and can vary significantly as individuals change their preferences and labour supply behaviour. Movements in the rate are not necessarily a result of changes in the demand for labour. If, for example, labour force participation is highly sensitive to job opportunities, an increase in employment may well be accompanied by an increase in the labour force, leaving the unemployment rate relatively invariant to the increase in employment.
- The concept of labour supply is not clear-cut. For purposes of official labour force statistics, the unemployed include people on temporary layoff and those who are without work but were actively looking for work in the four weeks ending with the survey week. Thus a person who is without work, is available and wishes to work but did not actively search in the month preceding the survey would not be counted in the labour force or among the unemployed. So-called “discouraged workers,” who cease looking for work because they believe no work is

available, are not counted among the unemployed although their numbers are compiled and published in the official statistics. On the other hand, some people are counted who may be considered voluntarily unemployed in the sense that they continue to search for the “right job” in spite of the availability of work that they could do.

Notwithstanding these difficulties, the unemployment rate has responded reasonably well to variations in demand for workers over the post-war period. Movements in the aggregate unemployment rate are shown in Figure 1-1 and movements in an alternative indicator are shown in Figure 1-2. The concept in Figure 1-2 is the ratio of employment to population, the percentage of the working-age population which is employed. Because this measure avoids the difficulty of defining those who

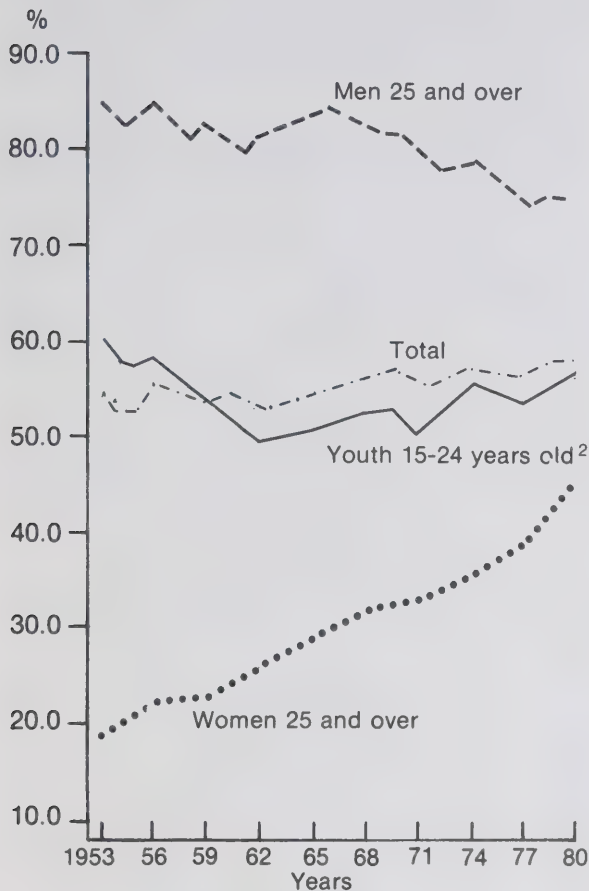
Figure 1-1
Consumer Price Index and Unemployment Rates, 1953 to 1980



Source: Based on Statistics Canada data.

Figure 1-2

Employment / Population Ratios, 1953 to 1980¹



¹Employment/Population Ratio is defined as employment divided by civilian source population.

²Youth 14-24 years old prior to 1966.

Source: Based on Statistics Canada, Labour Force Survey.

are in or out of the labour force, it is frequently used to complement the unemployment rate as an indicator of labour market performance.

Serious debate over the nature of unemployment, the numerical size of the unemployment rate which constitutes full employment, and the appropriate policies for reducing joblessness began in the early 1960s during the first serious post-war recession in North America. It is evident from Figure 1-1 that the unemployment rate, after remaining in the neighbourhood of 3 to 4 per cent during the early years of the post-war period, rose to relatively high levels in the years between 1957 and 1961. During this period the potential for conflict between employment and price stability goals and the costs and benefits associated with each began to be extensively examined.

Analysis of the nature of unemployment led economists to distinguish between unemployment stemming from a deficiency of aggregate demand in the economy and joblessness arising from other, non-cyclical, factors. The non-cyclical factors are longer run and more deep-seated in nature. They consist of:

- *frictional unemployment*, a normal characteristic of a dynamic labour market in which job turnover is continually occurring as people search for better jobs;
- *seasonal unemployment*, attributable to the seasonal nature of economic activity in some industries such as construction, fishing and agriculture; and
- *unemployment resulting from structural factors* such as technological change or changes in the industrial structure which cause mismatches between the requirements of available jobs and the skills, experience, or location of unemployed workers, as well as barriers in hiring practices and procedures which deny access to some groups.

With the exception of the seasonal component, non-cyclical unemployment has never been defined in a way which permits direct measurement with available data. We return to this issue below and in Chapter Three.

The major debate in the early 1960s was between:

- those economists who argued that the high unemployment of the time was a consequence of longer-run structural factors and was not amenable to influence by aggregate demand policies; and
- those who argued that a significant portion of unemployment was of a demand-deficient or cyclical nature which could be eliminated by expansionary fiscal and monetary policy.

The debate was most sharply etched in the United States, where the government formulated a view that the high unemployment prevailing at the time was attributable to both demand deficiency and structural factors. The Council of Economic Advisors argued in its 1963 Report that:

Success in a combined policy of strengthening demand and adapting manpower supplies to evolving needs would enable us to achieve an interim objective of 4 percent unemployment and permit us to push beyond it in a setting of reasonable price stability. Bottlenecks in skilled labour, middle level manpower, and professional personnel tend to become acute as unemployment approaches 4 percent. The result is to retard growth and generate wage-price pressures at particular points in the economy. As we widen or break these bottlenecks by intensified and flexible educational, training, and retraining efforts, our employment sights will steadily rise. (p. 42)

In Canada the government has never explicitly adopted a high employment goal expressed in terms of a target “full employment” rate. The first extended discussion of economic goals in Canada after the 1945 White Paper was contained in the First Annual Review of the Economic Council in 1964, which stated:

The question as to what would be a reasonable employment target for the Canadian economy is a particularly difficult one to answer. The concept of full employment varies considerably from country to country. Nowhere does it mean 100 per cent employment of the labour force. In any free society — even in countries experiencing an intense labour shortage — there is always a certain minimum amount of voluntary or unavoidable unemployment as workers move from one job to another. In the light of careful studies, we have concluded that a 97 per cent rate of employment, or a 3 per cent rate of unemployment, of the labour force would constitute a realistic objective to be aimed at over the balance of the 1960's, and that economic policies should be actively directed toward the achievement of this target. (pp. 37-39)

The Council explicitly recognized that the 3 per cent target had important implications for other objectives such as price stability. It further stated that:

While we consider this target to be a realistic objective for 1970, we do not regard it as an ultimate or ideal goal. Improved manpower policies can and should be developed and employed which, over the longer run, would help to reduce the minimum levels of frictional, structural and seasonal unemployment, thus making possible a higher employment target....we believe that this potential level of utilization of the labour force can be achieved on a sustained basis only if effective labour market policies are developed to promote higher and more efficient use of our manpower resources. (pp. 38-39)

Unemployment rates in both Canada and the United States declined dramatically in the mid-1960s following the large tax cut instituted in the United States and the 1962 devaluation of the Canadian dollar. These events demonstrated rather conclusively that a substantial portion of unemployment in the early 1960s was of a demand-deficient nature.

The mid-1960s, however, represented the only period during which the Economic Council target of 3 per cent unemployment has been approached. Since that time there has been a tendency for the unemployment rate to drift upward and for the rate associated with each successive peak in economic activity to be higher than that achieved at the preceding peak. In addition, the rate of inflation measured by the most commonly used

indicator, the Consumer Price Index, has tended to increase since the mid-1960s. These observations lead to two further questions.

- Why has the unemployment rate tended to drift upward over time: is it the result of an increase in demand-deficient unemployment, an increase in non-cyclical unemployment, or some combination of the two?
- What is the nature of the relationship between the unemployment rate and the rate of price inflation?

Why Has the Unemployment Rate Drifted Upward over Time?

Before addressing this question it is important to note that economists have never succeeded in measuring directly the cyclical and non-cyclical components of unemployment. Rather the measure of non-cyclical unemployment has always been defined inferentially in light of past experience. A crude way of doing this is to identify as non-cyclical that unemployment rate which occurred at the most recent peak level of economic activity. This non-cyclical unemployment rate can be interpreted as the lowest rate attainable in the short run using the instruments of macroeconomic policy.

Put another way, the non-cyclical unemployment rate effectively measures the concept of full employment in the short run. There has been a tendency for the full-employment unemployment rate defined in this way to drift upward over the past 15 years. In 1974, the last year in which the economy is generally agreed to have been operating at its capacity level of production, the unemployment rate was 5.3 per cent, compared with 3.4 per cent in 1966, the previous peak year.

Many economists would argue, however, that a rate in the neighbourhood of 5 per cent overstates the extent to which macroeconomic policy can permanently reduce unemployment. They would observe that the 5.3 per cent rate reached in 1974 was accompanied by rapidly rising wage and price inflation, and would assert that the only acceptable definition of the full-employment unemployment rate is one which takes account of the extent to which the price stability goal, or the inflation stability goal, is met. This leads to a definition of the unemployment rate attainable by macroeconomic policy as that rate observed to be consistent with a stable, or non-accelerating, rate of inflation, a rate sometimes referred to as the natural rate of unemployment. This concept is discussed later in the chapter.

Although the consensus among economists is that the apparent upward drift in the non-cyclical unemployment rate in recent years is attributable largely to labour

market factors, other factors may also have contributed. Labour is only one of a number of inputs into the production process. The amount of output we are capable of producing at any given time can be constrained by the quantity of labour supplied, its quality in terms of the skill and experience mix, and the size of the capital stock. Some would argue that the real constraint in recent years has been a slowdown in the rate of growth of the capital stock relative to the rate of growth in the labour force. This is a complex issue and is not within the purview of the Task Force. In any event there is general agreement among economists that a number of factors in the labour market — demographic, institutional, and behavioural — have contributed to the increase in non-cyclical unemployment over the past 15 years.

Table 1-1

Composition of Labour Force for
Selected Age/Sex Groups

	Youth	Adult women	Adult men	Total
	(per cent)			
1955	22.8	14.1	63.1	100.0
1960	21.9	17.3	60.8	100.0
1965	23.4	19.6	57.0	100.0
1970	25.4	22.4	52.2	100.0
1975	27.2	24.6	48.2	100.0
1980	26.4	27.7	45.9	100.0

Source: Based on Statistics Canada, *Labour Force Survey*.

As Table 1-1 shows, the demographic composition of the labour force has changed dramatically in recent years. The proportions of young people (ages 15 to 24) and of adult women in the labour force have increased rapidly over the past fifteen years, young people as a result of the maturing of the "baby boom" generation and increasingly in the 1970s because of rising youth participation rates, and adult women because of a very strong increase in their labour force participation rate. These changes resulted in a labour force in 1975 in which some 27 per cent were young people, compared with 23 per cent a decade earlier, and in which adult women comprised almost 25 per cent, compared with slightly less than 20 per cent in 1965.

Concomitantly, the proportion of the labour force consisting of the traditional "prime age male" declined over the same period from 57 per cent to slightly more than 48 per cent.

The adult female labour force was already growing very rapidly in the decade prior to 1965, but in that period there was no marked tendency for the unemploy-

ment rate of women to rise relative to that of adult men. It is significant, however, that the youth labour force began its rapid growth in the mid-1960s. Although there is little direct evidence, it is reasonable to infer that the rising relative unemployment rates of youth and adult women in the past fifteen years have been related to limits to the ability of the economy to absorb the extraordinarily large numbers of new entrants and re-entrants to the labour market with limited experience and, in many cases, with limited training. Moreover, hiring practices and procedures may have further restricted job opportunities to a narrow range of occupations.

A growing economy requires a mix of workers with varying skill and experience levels. For a given wage structure, there is a given rate at which entry level jobs (the kinds of jobs for which young people and many re-entering women are qualified) are created by a growing economy. This rate will be influenced by the nature of the industrial composition of economic and employment growth. The number of entry level jobs can be larger or smaller for a given aggregate rate of economic growth, depending on whether growth is concentrated in industries which require relatively large or small numbers of new entrants. It seems clear that the nature of economic growth in Canada in the 60s and 70s, concentrated largely in the service industries, was such as to facilitate absorption of very large numbers of new entrants and unskilled job seekers. As a consequence, the very large numbers of new entrants were absorbed remarkably well.

Adaptation of the economy to a changing mix of workers will be affected by the extent to which wages for different kinds of workers and jobs respond to changing supply and demand conditions in labour markets. There are good personnel management reasons why the relative wage structure does not respond rapidly to changes in the skill and experience mix of the work force. It is recognized by industrial relations specialists that abrupt changes in relative wages can have disruptive effects on employee morale and behaviour, reducing productivity and increasing unit labour costs.

The natural inertia in relative wages was intensified during the 1970s by the minimum wage policies of federal and provincial governments. On average, minimum wages increased rapidly in the first half of the 1970s both absolutely and relative to the average industrial wage. Pressure to increase minimum wage rates in all jurisdictions was partly a function of the thrust towards greater income equity and was reinforced by the tendency for social assistance benefits to be increased during this period. The provinces feared that the erosion of work incentives arising from higher rates of social

assistance benefits would swell the rolls and costs of social assistance. In recent years, the rate of increase in minimum wages has slowed down, perhaps because of an increasing realization that high minimum wages reduce employment prospects for important segments of the labour force.

There is little evidence available as to the extent to which relative wages of young people and adult women did in fact decline in response to the excess supply. Such evidence as there is suggests that the incomes of young people declined slightly during the late 1960s relative to the incomes of more experienced workers. The decline was not great and was reversed during the 1970s. Thus, on balance, the limited evidence available suggests that the adjustment in relative wages was not large.

The other major policy variable influencing the non-cyclical rate of unemployment was undoubtedly changes in unemployment insurance provisions. Specifically, the 1971 revisions to the UI program substantially increased benefits in terms of both replacement income ratios and duration. At the same time the qualifications regarding previous employment necessary to draw benefits were significantly reduced.

These changes may be expected to have increased the attractiveness of labour force participation, increased the rate at which people tend to quit existing jobs, and lengthened the duration of time people remain unemployed. Moreover, a more generous UI program reduces the costs of layoffs to employers. With higher and longer income replacement through UI, laid-off employees are more likely to wait for re-employment in the same firm, and employers are less likely to have to bear the costs of new hiring when production expands. A more generous UI program, therefore, may be expected to encourage employers to lay-off and rehire employees more frequently than they otherwise would.

Several studies have confirmed that the 1971 UI revisions had a significant impact on the unemployment rate, increasing it by approximately one percentage point. More recently, amendments to the UI legislation in 1975, 1977, and 1979 partially offset the 1971 changes by reducing the level of benefits and making application of the Act more restrictive, but significant incentives remain to encourage unstable employment patterns.

Several other factors have also influenced labour market behaviour through their effect on household income. The stability and levels of household income over time have been powerfully affected by the increasing frequency of multi-earner families and by the sustained growth in productivity which characterized much of the post-war period.

As more married women have entered the labour force, the number of multi-earner families has risen dramatically and the percentage of families with at least one unemployed person and no persons employed has declined substantially. In 1961, of those family units experiencing some unemployment, some 45 per cent had no persons in the family unit employed. By 1975 this percentage had declined to 33 and by 1980 to 26 per cent. In other words, by 1980 in 74 per cent of families with someone unemployed, at least one other family member was earning income.

The increase in multi-earner families and increased size and duration of UI payments suggest that the family income losses associated with unemployment are substantially less severe than they were in the early 1960s. This does not mean there is no hardship associated with unemployment; even among multi-earner families hardship may exist. The earnings of second and third workers in many multi-earner families clearly provide more than just "discretionary" income for luxury goods.

The evidence on higher levels and increased stability of family incomes has been used, along with analysis of labour market dynamics, in support of the proposition that unemployment is increasingly of a voluntary nature. We argue in the discussion of labour market dynamics in Chapter Three that one cannot derive this conclusion from the evidence on labour market flows. The income evidence is, however, consistent with the argument that the upward drift in unemployment is in part related to changing individual behaviour associated with higher levels and increased stability of incomes. In brief, the argument is that there is an increased degree of "voluntariness" in unemployment since the unemployed can now afford to search longer than they formerly could for jobs that match their skills, experience and aspirations.

While recognizing that there is some merit in this argument, the Task Force is of the view that it is not clear that a distinction between voluntary and involuntary unemployment is analytically meaningful or useful. This is an issue on which more work is needed. (It is discussed in two papers prepared for the Task Force by Graham Glenday and Glenn P. Jenkins.) The distinction between the concepts of unemployment and "not in the labour force" will remain unclear until we have a better understanding of the nature of voluntary and involuntary unemployment than we now have.

Moreover, it is not obvious that increased costs are associated with increased duration of job search. To the extent that increased search results in a better match of workers and jobs, unemployment may be associated with

longer-run gains in labour market efficiency which tend to offset its short-run costs.

It is important to note that all of the evidence adduced in support of the proposition that the non-cyclical rate of unemployment has drifted upward over time is inferential in nature. Indeed some economists would argue that the kind of evidence cited above merely describes what has happened in aggregate terms in labour markets during recent years and says very little about cause and effect.

It has been argued, for example, that the high and rising unemployment rate in recent years was “caused” by extremely rapid labour force growth and that the projected slowing of labour force growth will result in a lower unemployment rate because the smaller numbers of new entrants and re-entrants to the labour market will be more easily absorbed.

The Task Force does not accept this view. The relationship between labour force growth and unemployment is more complex than this analysis would suggest. For example, during the 1950s the labour force grew very rapidly but the unemployment rate remained at very low levels. In those years growth in aggregate demand was strong and induced a large flow of skilled and experienced immigrants into Canada. In the 1980s, slower labour force growth will be accompanied by substantial changes in the composition of the labour force. Since there will be fewer new entrants basing career choices on current and future needs, it follows that greater adjustment to changing industrial and regional demand will be borne by workers already in the labour force for whom adjustment is more difficult. This could tend to sustain high unemployment.

Our discussion to this point has concentrated on the unemployment rate. This rate, which measures the number of people experiencing unemployment at a point in time, is a “stock” concept and suggests that there exists a group of unemployed workers within the labour force which fluctuates very little over time.

Our understanding of the nature of unemployment is enriched by looking at the extent to which individuals move among the labour market states of employment, unemployment and “not in the labour force” over a period of time. This kind of analysis, which has developed substantially over the past ten years, recognizes that the particular individuals experiencing unemployment change from month to month as people move from one labour-market state to another. As a consequence, the proportion of workers experiencing unemployment during a year is significantly greater than is indicated by the average unemployment rate for the year.

For example, over the last five years there were, on average, about 832,000 unemployed in each month. Although some people remain unemployed for long periods of time, large numbers of people flow in and out of unemployment every month. On average during 1976-79 about 342,000 persons became unemployed each month, 361,000 left unemployment and 472,000 remained unemployed from one month to the next. Over the same period, there were on average over 10,000,000 persons in the labour force each month but about 428,000 left it. On average each month about 1,215,000 persons changed their labour force status. As a result of these movements into and out of the labour force, the number of persons in the labour force during a given year exceeded the average monthly labour force by about 14.5 per cent during 1976-78.

It is clear that the flows among the states of being employed, unemployed and not in the labour force are large and continuous. We report the preliminary results of our analysis of the employment experiences of a representative group of individuals, using UI administrative data, in Chapter Three. We have only begun to scratch the surface of this rich data base. Further analysis should greatly improve our knowledge of unemployment, but difficult analytical problems remain to be solved. For example, we do not yet know of any satisfactory methods by which to link analysis of individual unemployment experience with the more aggregate analysis discussed in this chapter.

The Task Force draws the following conclusions from this analysis.

- There are both demand-deficient and non-cyclical components to unemployment which must be dealt with jointly by a mix of aggregate demand and labour market policies, subjects which are discussed below.
- The evidence strongly suggests that the non-cyclical component of unemployment has increased significantly in recent years. This suggests less scope for reducing the rate substantially in the short run and enhances the importance of medium-term labour market policies.
- Unemployment should not be perceived as a voluntary phenomenon experienced by a large proportion of workers.
- The current state of labour market analysis is unsatisfactory in the sense that it does not permit a disaggregation of the components of total unemployment into their longer-term non-cyclical and demand-deficient components. There is as yet no way that we know of to link microanalysis of labour markets with macroeconomic analysis. The Task

Force is uneasy about this but has no ready answers. It is clear that this is an area of analysis in which more work is urgently required.

The Trade-off between Inflation and Unemployment

In setting its goals for the Canadian economy in its 1964 Review, the Economic Council recognized that:

The strong demand positions which are required to attain high levels of output and employment also tend to exert upward pressures on prices. In such circumstances, therefore, there are dangers of a broadening range of price increases as the economy reaches higher levels of activity. Bottlenecks tend to develop in the supplies of skilled manpower and particular items of machinery and investment goods, and prices and costs begin to creep up. (p.104)

Recognizing that achievement of reasonable price stability would be difficult to attain under conditions of high employment and vigorous growth, the Council noted that a number of conditions and policies would be necessary, including increased adjustment to change, mobility of productive resources and “greatly increased emphasis on effective labour market policies and more comprehensive long-term planning in business firms.” (p.189)

The Council’s unemployment objective was never reached and the generally higher rates of unemployment experienced in the years subsequent to its 1964 Review were accompanied by an increase in the rate of inflation. Government concern at these events led to the issuance in 1968 of a White Paper on *Policies for Price Stability* (Dept. of Consumer and Corporate Affairs, 1968), which concluded that the means available to government for influencing the Canadian economy were not sufficient “to resolve the very real conflict which exists at the present time between the objectives of maintaining high level employment and restoring the price stability that is necessary for sustained economic growth” (p. 10). A Prices and Incomes Commission was established in 1969 to examine and report on these issues.

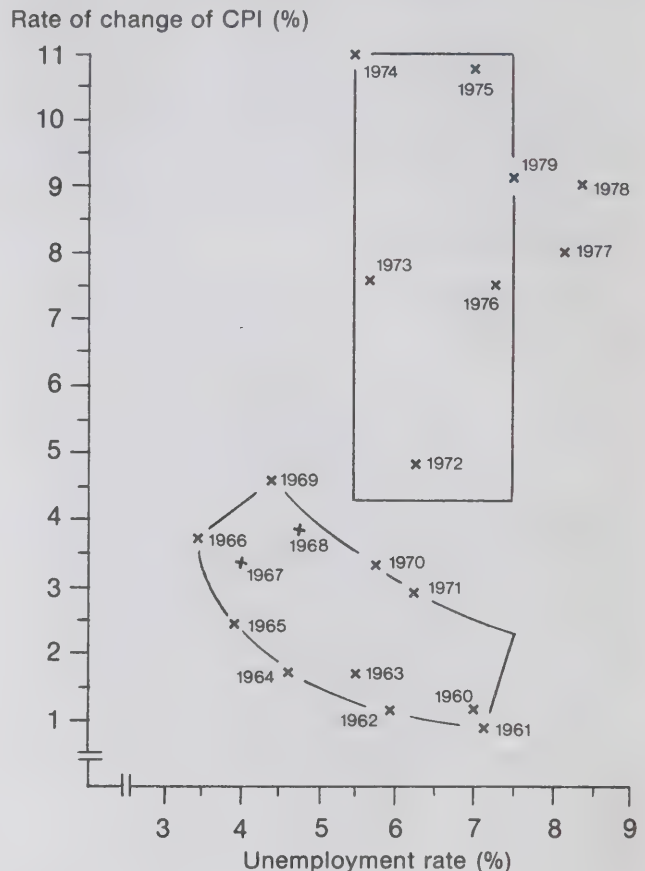
The experience of rising inflation and unemployment was common to many industrialized economies and led economists to investigate intensively the nature of the relationship between labour market pressure, measured by the unemployment rate, and the rate of price inflation.

Throughout most of the 1950s and 1960s an inverse relationship prevailed between the rate of unemployment and the rate of price increase, as shown in Figure 1-1, so that in periods when the unemployment rate was

declining the rate of price increase was rising. On the basis of this observed relationship, economists developed the notion of the “trade-off” curve, obtained by plotting the information in Figure 1-1 in a slightly different way, as shown in Figure 1-3.

Figure 1-3

Inflation and Unemployment, Canada, 1960 to 1979



Source: Based on Statistics Canada data.

Looking only at the data in Figure 1-3 for 1961 to 1966, what this relationship seemed to be saying was that societies could achieve very low rates of unemployment so long as they were prepared to tolerate higher rates of inflation. This relationship seemed to imply that the instruments of macroeconomic policy could effectively reduce non-cyclical unemployment so long as society was prepared to pay the price in the form of a higher rate of inflation. Early analysis of the trade-off was conducted largely in the absence of any independent analysis of the non-cyclical rate of unemployment; in an influential Canadian study published by the Economic Council (1967), the authors simply assumed that “full

employment” was equal to the Economic Council’s target level, noted earlier, of 3 per cent.

The fact that more complete and systematic consideration of the importance of the non-cyclical rate of unemployment was not included in early analysis of the trade-off is probably due to the fact that it was initially derived as a purely empirical relationship. More systematic analytical investigation of the underpinnings of the trade-off relationship in the late 1960s led to a substantial reinterpretation of its nature in the light of the wage and price setting mechanisms of firms and workers and of the concept of the non-cyclical rate of unemployment which, for purposes of this analysis, was renamed the “natural rate” of unemployment.

In essence the argument was that if the government tried to force the unemployment rate below this equilibrium level, prices would increase at a higher rate and as wage increases caught up with the higher rate of price increase the economy would be pushed back to its initial equilibrium or “natural” unemployment rate. Thus the economy could only be kept operating at a rate of unemployment below the so-called natural rate if government and society were prepared to see the rate of inflation continue to escalate to ever higher levels.

Many economists argue that the natural rate of unemployment is essentially what we earlier called the non-cyclical unemployment rate. The estimated size of the natural rate of unemployment, however, is not always derived from characteristics of the operation of the labour market per se, but rather from an assessment of the particular level of unemployment observed from recent history to be consistent with a stable rate of inflation. Put another way, the estimated size of the natural rate of unemployment can change quite independently of changes in labour market conditions, if characteristics of the inflationary process change.

Estimates of the size of the natural rate of unemployment in Canada have tended to increase steadily in recent years. While labour market factors may well have contributed to the increase, it is likely that changing dynamics of the inflationary process have also been important. Indeed, in recent years the rate of inflation has outpaced the rate of increase in wages by a significant margin, so that it is doubtful that the current high level of inflation has been generated by excessive tightness in labour markets.

As the unemployment rate has tended to drift upward in recent years, the inflation rate has tended to rise over time independently of short-run variations in economic activity. As is the case with unemployment, although proximate reasons can be adduced for any given increase in the inflation rate, the inflationary process in all its

manifestations is not well understood. An increasing number of economists and social critics argue that the process of economic growth itself has been a contributing factor and that, notwithstanding the substantial increase in average levels of economic well-being in recent years, perceived inequities within and among nations have been a principal source of a restless quarrel over shares that has seriously escalated over the past few years. Further, it is argued that the quarrel has been intensified as rising energy, food and housing prices have led to substantial income transfers and the losers have sought to protect themselves from the resulting declines in their real incomes.

It is not surprising that governments feel hamstrung in this environment. Nor, one can plausibly argue, is it surprising that governments should view with increasing concern the prospect of a socially debilitating acceleration in the rate of inflation from a level which is already high. In other words, the perceived costs of risking a further increase in the rate of inflation loom larger and larger, the higher the actual rate.

On the other hand the perceived costs associated with historically high rates of unemployment, although they continue to be real and substantial in terms of forgone output, have tended in other important aspects to decline in recent years. In particular, it is clear that the hardship associated with unemployment is today much less than it was even 15 years ago.

It is plausible and reasonable to argue that the perceived costs of the risk of higher inflation have risen substantially in recent years, while the costs to individuals associated with an historically high unemployment rate have declined. It is understandable, therefore, that governments should be increasingly reluctant to risk the costs associated with higher inflation in order to obtain the perceived lower benefits attainable from lower unemployment.

In summary, given the increased susceptibility of the economy to escalating inflation, the price of reducing unemployment by the use of aggregate demand policies alone has become very high. Similarly, given the extent to which high inflation appears to be entrenched in the economy, the price of reducing inflation solely by more restrictive aggregate demand policies is also likely to be extremely high because it would require a substantially increased level of unemployment maintained for a prolonged period of time.

In this environment it is critically important that structural labour market policies be realigned and reoriented to improve and facilitate adjustment processes in labour markets. To the extent that this can be done, the

degree of labour market tightness associated with any given degree of unemployment can be reduced, resulting in lower inflationary pressure and enabling the instruments of macroeconomic policy to be used to greater effect to reduce the unemployment rate.

The Trade-off between Equity and Efficiency

Although the Canadian economy, like others in the industrialized world, has faced increasing difficulty in recent years in achieving simultaneously the goals of full employment and reasonable price stability, the pace of economic growth over the post-war period has been rapid and reasonably well sustained. There has, however, been wide variation in the degree to which individuals and regions have had access to jobs and income.

Government tax and transfer policies have been increasingly governed by equity considerations. Labour market policies and programs since the 1960s have attempted to improve the employability of hard-to-employ workers. There has been increasing concern at the marked diversity of employment opportunities and incomes across provinces, and various equal employment opportunity measures have been instituted, such as enactment of the *Canadian Human Rights Act* and its provision for equal pay for work of equal value.

With respect to regional disparities in job opportunities and unemployment, considerations of economic efficiency would argue for enhanced programs of labour mobility to allow and encourage workers in areas of high unemployment to be trained for and move to areas of abundant job opportunities. However, the social costs associated with migration on a scale sufficient to alleviate these disparities have been regarded as unacceptably large for both receiving and sending regions. Increasing use has been made of government policies and programs to improve employment opportunities in high unemployment regions rather than to encourage outward mobility.

This was reflected in the establishment of the Department of Regional Economic Expansion, which administers programs to enhance the level of economic activity in slow-growth regions by providing direct support to industrial activities, funds to improve the infrastructure and to enhance the development of selected industrial sectors such as agriculture and tourism.

It was also reflected in programs of direct job creation and income transfers targeted increasingly at regions of

chronically high unemployment and relatively low incomes.

In cases where distributional motivations predominate, difficult choices have to be made among competing goals and objectives. For example, extending support to activities in slow-growth areas can have a number of consequences.

- Workers will be encouraged to remain in or return to the slow-growth areas and net out-migration will be reduced. While the individuals involved may as a consequence consider themselves to be better off, there is a cost to the Canadian economy as a whole.
- Outputs in high-growth regions can be retarded because the labour supply is lower than it would otherwise be.

There are situations, however, in which the goals of equity and efficiency are mutually supportive. This is most clearly the case with respect to measures designed to better integrate women and Native people into the labour force. To the extent that these groups acquire a greater diversity of skills and experience, equity will be increased, labour market adjustment processes will occur more smoothly and the economy will be able to adapt more easily to changes in the industrial and geographic structure of economic activity. Chapter Four argues that improved integration of women and Native people will in fact be critical to a smoothly functioning economy in the years to come.

Where equity and efficiency goals conflict, there are no hard and fast criteria on the basis of which decisions can be made as to the appropriate mix of equity and efficiency considerations. Choosing the appropriate mix is a profoundly political choice and is the prerogative of society as represented by its government. It is important, however, that the true costs of such choices be known and form a part of the decision-making process. This question is discussed in later chapters with respect to specific issues.

The costs to society can, however, be inordinately high and the inefficiency associated with programs to achieve equity goals may be unduly large if such programs are designed and used as a result of a faulty diagnosis of the problem to be rectified. These issues with respect to labour market programs are discussed in more detail in Chapter Two, which concludes that in some important respects labour market programs have been used in inappropriate ways and that the costs associated with achieving equity goals can be significantly reduced by a realignment of policies.

The Role of Labour Market Policy Instruments

Virtually all studies and discussions of the policies required to achieve the goals of high employment and reasonable price stability stress:

- the limited ability of the levers of macroeconomic policy to achieve low unemployment in the short run; and
- the importance of longer-run structural policies to facilitate the operation of labour market adjustment processes leading to lower levels of non-cyclical unemployment.

The role of structural policies in general and of labour market policies in particular was ably stated by the Standing Senate Committee on National Finance in their 1971 report:

From a stabilization standpoint, supply and structural policies basically do two things for the economy:

1. They steepen the potential growth path of the economy by increasing the supply of goods and services available.
2. They make it easier for the economy to return to its growth path without serious inflation following a downward deviation into slackness and unemployment. This return to the growth path never occurs evenly across the economy but instead is characterized by particularly rapid demand growth, now in one group of sectors, now in another. Effective supply and structural policies permit it to go ahead more steadily with fewer bottlenecks and "spot" inflationary outbreaks.

In the heat and passion of an economy caught in a serious inflationary problem, these policies have little appeal, which is one major reason why they have not been stressed nearly enough in Canada. ... This is the typical political situation, not just in Canada, but in any stop-go economy faced with a serious inflationary outbreak. In such an atmosphere, slower-working policies command little attention and indeed offer little practical escape from the immediate difficulty.

But in the context of a longer-run and ultimately more effective anti-inflationary strategy, these policies come into their own. Far from being irrelevant, they offer perhaps the most important practical way in which government policy can move to reduce the trade-off dilemma between high employment and price stability. And...their side effects are mostly good, consisting of such things as higher gains in productivity and living standards.

We therefore strongly endorse the general concept of supply and structural policies, considering them to be an absolutely indispensable part of a really effective economic stabilization strategy. (p. 66)

These words were written ten years ago. We would argue even more strongly that in the present environment, in which significant shifts in either direction in the use of macroeconomic policy are perceived to be impossible, structural policies, of which labour market policy is an important element, are even more critical in achieving good economic performance.

Labour market policy can be characterized as having three main elements:

- policies designed to facilitate the operation of labour markets and improve adjustment processes including unemployment insurance, the employment service and adjustment assistance;
- policies concerned with improving the quality of labour supply, including training, geographical mobility, and immigration; and
- policies concerned with employment demand, comprising the activities of DREE, the job creation activities of the CEIC, the industrial incentives programs of other government departments and measures to improve the integration of some groups into the labour market.

The central role of all labour market policies is to contribute to better economic performance by increasing the extent to which the available supply of labour is employed in productive jobs. Many of the elements of labour market policy operate on the supply side of the market to facilitate the adaptation of workers to changing economic circumstances among industries and geographic regions, and to changing production technology. Other measures, operating on the demand side, are designed to improve the opportunities for productive employment of workers in regions of high unemployment and to preserve a reasonable distribution of the population across the country.

In much of the discussion of labour market policies throughout this report, we have stylized the roles of the various policy instruments and the problems with which they deal as if different problems existed independently of one another and could be dealt with separately by use of different policy instruments as appropriate. We argue, for example, that cyclical problems are appropriately dealt with by the tools of macro-economic policy and problems relating to the structure of labour markets by one or more of the various labour market policy instruments.

In fact it is frequently difficult to diagnose the extent to which a particular problem is short or long run, cyclical or structural in nature. Longer-run structural changes are often initially perceived as being temporary and only become recognized as chronic over time. As a consequence, the policy response is frequently to adopt measures to maintain employment and income in the affected firm, industry or region. Moreover, the policy response may also be conditioned by prevailing economic and social conditions. Where, for example, the use of macroeconomic policy is constrained by fears of accelerating inflation, a strong temptation exists to introduce a series of smaller measures to maintain employment, measures which may well operate to impede growth in productivity and income over the longer run.

It is also important to realize that the smoothness with which labour market adjustment processes operate in the economy is strongly influenced by the state of aggregate demand as well as by labour market policies.

- Positive adjustment, i.e., adjustment which leads to more productive employment and higher productivity growth, is much more easily accommodated when aggregate demand is strong than when conditions are slack and cyclical unemployment is high.
- Workers find it easier to move out of declining industries when abundant job opportunities exist elsewhere in the economy.
- The severity of structural problems is significantly influenced by the state of aggregate demand. Hard-to-employ people tend to be most severely affected by recessions.

Macroeconomic and labour market policies are, therefore, complementary both in the sense that they deal with different problems and in the sense that they must work in tandem if they are to be most effective in smoothing the process of adjustment and in leading to higher growth in productivity, income and employment.

Conclusion

Our starting point in this chapter was an examination of the nature of the commitment of successive governments in Canada to the goal of high employment. It was noted that a specific full employment goal has never been explicitly accepted by the federal government, although in the 1960s the 3 per cent target suggested by the Economic Council in 1964 came to be used in much public discussion and debate. It is fair to state, however, that over most of the post-war period, there was a

widespread consensus among politicians and the professional economics community that a relatively low level of unemployment could be achieved and sustained without accelerating inflation.

Over the course of the 1970s this consensus largely disappeared. The experience of the late 1960s and 1970s led to doubts that unemployment could be significantly and permanently affected without a concurrent rise in the rate of inflation. Economists have generally agreed that developments in labour markets have tended to increase the unemployment rate independently of cyclical factors. These developments relate to the demographic changes which have occurred in the labour force, to the increasing prevalence of multi-earner families and to certain policy changes instituted by government, most importantly the increased eligibility for and size of unemployment insurance benefits. As a consequence, not only has the non-cyclical unemployment rate risen but the hardship associated with unemployment has been substantially reduced. This is not to suggest either that none of the unemployed are poor or that hardship and poverty are associated only with unemployment. Indeed significant numbers among the employed suffer from low incomes, as do some people experiencing unemployment. The point is that hardship is associated with unemployment to a much smaller extent now than used to be the case.

More generally, our discussion of the goals of government has indicated that the difficulty of achieving a number of goals simultaneously has increased in recent years and the nature and extent of government intervention has changed. As a consequence the process of policy-making has become much more complex, and difficult issues related to the trade-offs between equity and efficiency must be continually faced and resolved.

We have argued that in the current environment of high inflation and unemployment, use of the instruments of macroeconomic policy is severely constrained. Effective use of structural measures, of which labour market policy is a critical part, is therefore essential. More smoothly functioning labour markets can provide more scope for macroeconomic policy to reduce unemployment without increased inflation. We have also stressed that labour market policies are not sufficient by themselves to reduce unemployment; they are complementary to macroeconomic policies, not substitutes for them. Maintenance of a productive, high-employment economy requires effective use of both.

The analysis in this chapter has benefited from a report prepared for the Task Force by Professor Orley Ashenfelter entitled "What Is a Full Employment Goal in the 1980s?"

Chapter Two

Labour Market Conditions in the 1960s and 1970s and the Labour Market Policy Response

This chapter provides some perspective on labour market developments in Canada and abroad in the recent past as a basis for understanding the way in which labour market policies evolved over the 1960s and 1970s and as background to our analysis of labour market trends in the 1980s which follows in Chapter Four.

During the 1960s and 1970s there were marked changes in the conditions confronting labour markets in all industrialized countries. In Canada the dominant characteristic was the marked acceleration in labour force growth which began in the mid-1960s. In all industrial countries rates of inflation and unemployment have tended to drift upward over time independently of cyclical factors, although the increases have been particularly marked in the years since the worldwide recession of 1974.

Reflecting the need to develop measures to facilitate the absorption of a rapidly growing labour force, labour market policies were expanded rapidly in Canada in the late 1960s and early 1970s. Many European countries, faced with high inflation and high unemployment in the mid-1970s, engaged in greatly expanded measures of

training, job creation and job maintenance. More recently it has been perceived in all countries, including Canada, that such measures frequently impede labour market adjustments which are desirable in the longer run, and there is now a tendency to reorient policies to facilitate positive adjustment.

In discussing the goals of labour market policy Chapter One outlined in broad terms the nature of recent changes in the labour market which have led to an increasing unemployment rate. This chapter outlines underlying developments in more detail, beginning with a brief overview of international trends in the growth of labour supply, demand, GNP and productivity. We then outline labour supply and demand developments in Canada, followed by a discussion of developments in regional labour markets and the evolution of labour market policies internationally and in Canada. The chapter concludes with some generalizations about the current state of labour market policies.

Recent International Developments

Table 2-1 shows rates of growth in labour force, employment and real output for major industrial countries over

Table 2-1

Changes in Labour Force Employment and Output for Selected OECD Countries (average annual per cent rate of growth)

	Labour force		Employment		Output ²	
	1961-73	1973-79	1961-73	1973-79	1961-73	1973-79
Canada	2.9	3.4	3.0	3.2	5.6	3.8
United States	1.9	2.5	1.9	2.5	4.1	2.9
Japan	1.2	1.1	1.3	1.0	10.5	4.8
France	0.9	1.2	0.9	0.3	5.6	N/A
West Germany	0.1	-0.3	0.1	-0.6	4.5	2.7
Italy	-0.7	2.1	-0.7	1.5	5.1	4.5
Sweden	0.9 ¹	1.0	0.7 ¹	1.1	2.4 ¹	1.8
United Kingdom	0.2	0.7	0.1	0.4	3.2	1.9

¹1970-73.

²GNP or GDP in real terms.

Source: Based on OECD, *Labour Force Statistics*, various years, and *Main Economic Indicators*, historical statistics, 1960-79.

the past two decades. The period is divided at 1973 so that developments before and after the energy price explosion can be compared and contrasted.

It is evident that Canada had by far the largest growth in both labour force and employment over the entire period. The only country to approach our labour market performance was the United States, but even there the annual growth rates of labour force and employment averaged almost a full percentage point less per year than in Canada.

During the 1960s and early 1970s, the rate of growth in real GNP in Canada was exceeded only by that of Japan, although relatively high rates of growth were also achieved in many European countries and in the United States. It will be noted that variations in rates of real output growth among countries do not simply reflect variations in the growth of employment. Indeed, in the 1961-73 period, both West Germany and Japan had rates of labour force and employment growth substantially lower on average than those of Canada, yet their rates of growth of output were either equal to, in the case of Germany, or substantially greater than, in the case of Japan, that of Canada. The difference between growth in real output and growth in employment reflects the rate of growth in output per worker, or productivity. Evidently Japan and many European countries which had relatively low rates of population and labour force growth achieved high rates of increase in real output as a consequence of their productivity performance.

Reflecting the impact of the oil price increase in 1973, the deep international recession and the sustained period of economic slack which followed, rates of growth in real GNP in all major industrial countries have been signifi-

cantly lower in the post-1973 period than in earlier post-war years. In Canada real GNP growth has averaged 3.8 per cent since 1973 compared with 5.6 per cent in 1961-73. Employment growth has remained strong, however, averaging only slightly less than the 3 per cent growth rate of 1961-73. That employment growth remained as strong as it did resulted from a dramatic decline in the rate of growth of productivity.

This pattern was not unique to Canada. Indeed, as is evident from Table 2-1, reduced GNP growth has been reflected much more in reduced productivity growth than in reduced employment growth.

Productivity growth is a key component of increases in a country's standard of living, for which the relevant indicator is not the growth rate of real GNP but rather the growth rate of real GNP per capita. The rate of growth in living standards depends on:

- the extent to which output per worker is rising; and
- the extent to which the number of people employed is rising relative to a country's population.

Table 2-2 shows, for major industrial countries, the pattern of developments in productivity, the ratio of employment to population, and output per capita over the last two decades. The output per capita data show that Canada ranked significantly lower in terms of increases in the standard of living than it did for both employment and total real output growth. This is because productivity growth in Canada was significantly lower than in Japan and in many European countries. The effect of lower productivity growth in Canada was offset to some extent, however, by a significantly larger increase in the ratio of employment to total population.

Table 2-2

Contribution of Productivity and Labour Supply Factors to Per Capita Output for Selected OECD Countries
(average annual per cent rate of growth)

	Output per worker ¹		Employment to total population ratio		Output per capita	
	1961-73	1973-79	1961-73	1973-79	1961-73	1973-79
Canada	2.6	0.6	1.4	2.0	4.0	2.6
United States	2.2	0.4	0.7	1.7	2.9	2.1
Japan	9.2	3.8	0.1	-0.1	9.3	3.7
France	4.7	N/A	-0.1	-0.2	4.6	N/A
West Germany	4.4	3.3	-0.8	-0.6	3.6	2.7
Italy	5.8	3.0	-1.4	0.9	4.4	3.9
Sweden	1.7 ²	0.7	0.2 ²	0.8	1.9 ²	1.5
United Kingdom	3.1	1.5	-0.4	0.4	2.7	1.9

¹GNP or GDP in real terms.

²1970-73.

Source: Based on OECD, *Labour Force Statistics*, various years, and *Main Economic Indicators*, historical statistics, 1960-1979.

It is tempting but wrong to conclude from these observations that productivity growth is inimical to employment growth. The experience of the 1960s and early 1970s demonstrates the fallacy of this argument — higher productivity growth can reduce inflationary pressures and allow the economy, and the labour market, to operate at higher levels of utilization. This is a variant of the argument of Chapter One that a more productive, efficiently functioning economy contributes to higher output and employment growth by reducing the inflationary pressure associated with any given level of unemployment. Our international competitiveness is improved and monetary and fiscal policy have more scope to increase output and employment.

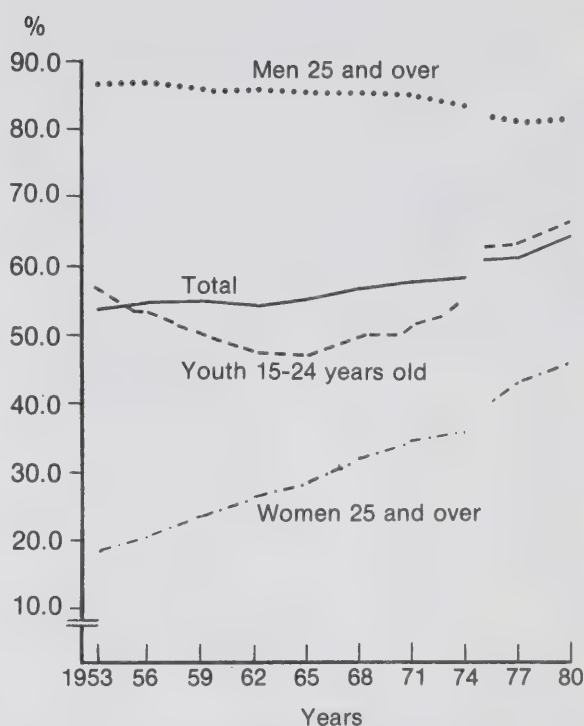
Finally, and most importantly, the demographic developments which will occur in Canada over the next decade (discussed in Chapter Four) imply the need to rely much more on productivity increases to improve our standard of living than in the recent past.

Labour Supply Developments in Canada

Labour force growth stems from two sources — growth of the working-age or “source” population (domestic and immigrant) and growth of labour force participation. Labour force growth in Canada has been particularly strong since 1966,¹ averaging some 3.3 per cent annually for 1966-79. Table 2-3 shows the sources of this growth. In the early part of this period the accelerated growth stemmed mainly from growth of the domestic source population as the baby boom generation reached working age. Rising participation rates also contributed to an increasing extent to labour force growth in the 1970s, particularly in the period since 1973.

Since 1973 growth of the source population has been slowing down while growth in participation rates has accelerated for both young people and adult women. Figure 2-1 shows the large and sustained rise in partici-

Figure 2-1
Participation Rates, 1953 to 1980



Note: The historical series break in 1975, the year in which major revisions were made to the *Labour Force Survey*. The most abrupt break occurs in the case of the less-than-25 group. Prior to the revisions, this group consisted of 14-24 year olds. With the revisions, it was redefined to comprise 15-24 year olds.

Source: Based on Statistics Canada, *Labour Force Survey*.

Table 2-3

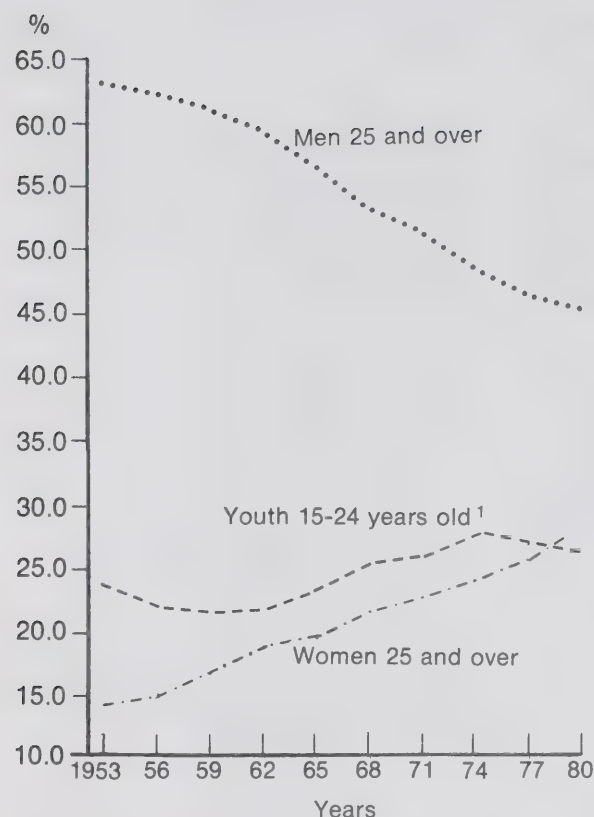
Sources of Labour Force Growth (average annual per cent rates of growth)

	1951-56	1956-66	1966-73	1973-79	1976-79
Source population	2.1	2.2	2.6	2.2	2.1
–Net immigration	1.0	0.5	0.4	0.4	0.2
–Domestic	1.1	1.7	2.2	1.9	1.9
Participation rates	–0.1	0.4	0.7	1.0	0.9
Total labour force	2.1	2.6	3.3	3.3	3.0

Source: Based on Statistics Canada, *Labour Force Survey*.

¹ The sub-periods 1956-66, 1966-73 and 1973-79 are used throughout this chapter because 1956, 1966, 1973 and 1979 are all years of peak economic activity in Canada at the national level. Therefore the growth rates over these periods are not unduly affected by cyclical disturbances and can be taken to reflect trends in the labour market.

Figure 2-2
Labour Force Composition, 1953 to 1980



¹ Youth 14-24 years old prior to 1966.

Source: Based on Statistics Canada, *Labour Force Survey*.

pation rates among adult women and the change in the youth participation rate, which fell substantially in the period up to 1966 and has subsequently increased significantly, largely due to variations in school enrollment rates.²

Table 2-3 also shows the changing contribution of immigration to labour force growth. During the years of the resource boom in the 1950s, when demand conditions were extremely strong and unemployment rates low, fully one-half of Canada's labour force growth was comprised of immigrants. The contribution of immigration declined substantially in the late 1950s and since 1966 has accounted for only about 12 per cent of labour

² For a detailed analysis of factors underlying changes in labour force participation rates, see Ciuriak and Sims, 1980.

force growth. Since 1975 the contribution of immigration has been even less, about 6 per cent of the labour force increase.

The decline in the relative importance of immigration to the labour market since the 1950s reflects the joint operation of a number of factors: the much larger increase in the domestic labour force noted above; the reduced relative attractiveness of Canada as unemployment rates have tended to rise and living standards in traditional source countries have risen; the decreasing proportion of immigrants selected according to labour market criteria within the total immigration flow; and, in recent years, a more restrictive immigration policy.

These changes in population and participation rates produced a dramatic shift in the composition of the labour force, as shown in Figure 2-2. The youth share of the labour force increased substantially to 1975; since then it has declined as a result of slower population growth. The adult female proportion has increased strongly and steadily throughout the period since the mid-1950s, reflecting the continuing dramatic increase in female participation rates. Conversely, the labour force share comprised of adult men has declined steadily, falling from 63 per cent in 1955 to 46 per cent in 1980.

The rapid growth in the labour force and its dramatically changing composition was accommodated reasonably well by the economy. Table 2-4 shows that employment growth accelerated in the late 1960s and 1970s

Table 2-4

Employment and Labour Force Growth of Demographic Groups (average annual per cent change)

	1951-56	1956-66	1966-73	1973-79
Total				
Employment	1.9	2.6	3.1	3.2
Labour force	1.9	2.6	3.3	3.4
Population	2.0	2.2	2.6	2.2
Youth				
Employment	0.1	3.2	4.7	3.5
Labour force	0.1	3.1	5.2	3.9
Population	0.9	3.8	3.7	1.9
Women 25 and over				
Employment	4.6	5.9	4.9	5.4
Labour force	4.6	5.9	5.2	5.6
Population	2.4	1.8	2.3	2.4
Men 25 and over				
Employment	1.9	1.5	1.7	1.9
Labour force	2.0	1.4	1.7	1.9
Population	2.2	1.5	2.1	2.2

Source: Based on Statistics Canada, *Labour Force Survey*.

and that growth was concentrated in the most rapidly growing groups—youth and adult women. Developments in the unemployment experienced by different demographic groups can be observed by comparing their rates of growth in employment and labour force. Although employment of both young people and adult women has been relatively strong, it has grown at a lower rate than the youth and adult female labour force. Consequently, unemployment rates for youths and adult women have drifted upward over the period both in absolute terms and relative to the rate for adult men. These developments are summarized graphically in Figure 2-3.

Thus, in contrast to the 1950s, when extremely strong demand led to strong labour force growth which in turn resulted primarily from large-scale immigration, the late 1960s and 1970s were characterized by very strong growth in the work force stemming from demographic factors and from changing labour force participation behaviour. As discussed in Chapter One, the resulting changes in labour force composition contributed to the tendency of the unemployment rate to increase over the past decade.

The Industrial and Occupational Composition of Employment

The industrial composition of employment reflects the industrial pattern of output and productivity in the economy. Over the post-war period the share of national output accounted for by the service sector has tended to rise and the share of the primary sector to decline, largely as a result of a declining contribution from agriculture. The share of the secondary sector (manufacturing and construction) has also declined.

Because the service sector is more labour intensive than the goods-producing sector, its share of total employment is higher than its share of output. Moreover, since productivity growth tends to be slower in service than in goods-producing industries,³ the service sector share of employment has tended to rise more rapidly than its share of output. In agriculture, productivity has increased dramatically in the post-war period and until recently there has been a substantial and sustained decline in agricultural employment. As a consequence of this pattern of output and productivity growth, the pattern of employment growth in the past two decades (shown in Table 2-5) has been one of:

- very high growth in the service sector;
- moderate growth in manufacturing and construction industries; and

³ There are severe measurement problems in measuring output and productivity in the service sector. These difficulties are outlined in some detail in a recent Department of Finance study (Sims and Stanton, 1980).

Figure 2-3
Labour Market Variables



Note: The historical series break in 1975, the year in which major revisions were made to the labour force survey. The most abrupt break occurs in the case of the less-than-25 group. Prior to the revisions, this group consisted of 14-24 year olds. With the revisions, it was redefined to comprise 15-24 year olds.

Source: Based on Statistics Canada, Labour Force Survey

- a substantial decline in the employment of primary industries, entirely attributable to declining employment in agriculture.

That the changing composition and very rapid growth of the labour force since the mid-1960s were accommodated as well as they have been is attributable in large measure to the strength of the service sector, in which there are large numbers of entry level and part-time jobs suitable to new entrants or re-entrants to the labour force and many jobs traditionally held by women.

There has, however, been a noticeable shift in the pattern of employment growth in the years since 1973 — service sector employment growth has declined from its very high rate in 1966-73, employment in manufacturing and construction industries has grown at about the same rate as in the previous period, and

employment in primary industries has begun to expand for the first time in the post-war period. Growth in primary sector employment is partly attributable to more rapid growth in mining but also to the fact that the number of jobs in agriculture is no longer declining. As a result of these changing trends, the contribution of the service sector to employment growth declined significantly in 1973-79 (following an increase in its contribution between 1956-66 and 1966-73) while the contribution to employment growth of goods-producing industries rose.

Table 2-6 shows the occupational implications of the changing industrial composition of employment. The contribution to employment growth of white collar jobs has declined somewhat since 1973, although 81.1 per cent of new jobs in the economy continue to be in this category.

Table 2-5
Industrial Composition of Employment Growth

	Average annual rates of growth			Per cent contribution to overall employment growth		
	1956-66	1966-73	1973-79	1956-66	1966-73	1973-79
Primary Goods	-2.9	-1.7	1.2	-16.6	-5.4	2.9
Mining	0.9	2.1	4.3	0.6	1.0	2.1
Other Primary	-3.5	-2.4	0.4	-17.2	-6.4	0.7
Secondary Goods	2.8	2.1	2.3	32.5	20.4	19.4
Manufacturing	2.6	2.1	1.8	23.7	15.9	12.2
Construction	3.5	2.2	3.8	8.8	4.5	7.2
Services	4.2	4.4	3.8	84.1	85.0	77.7
Total	2.6	3.1	3.2	100.0	100.0	100.0

Source: Based on Statistics Canada, *Labour Force Survey*.

Table 2-6
Occupational Composition of Employment Growth

	Average annual rates of growth		Percentage contribution to overall employment growth	
	1966-73	1973-79	1966-73	1973-79
White collar occupations ¹	4.4	4.2	84.7	81.1
Blue collar occupations ²	1.0	1.6	15.3	18.9
Total economy	3.1	3.2	100.0	100.0

¹Managerial, professional, clerical, sales and services occupations.

²Primary occupations, processing, construction, transportation, material handling and other crafts.

Source: Based on Statistics Canada, *Labour Force Survey*.

Reflecting the increased relative importance of employment in the goods-producing industries since 1973, the growth rate of blue collar jobs increased significantly as did their contribution to total employment growth. In 1979 demand for the output of some manufacturing industries was strong enough to bring production close to the limits of their productive capacity. Certain labour shortages emerged, particularly for skilled workers in the manufacturing sector,⁴ although relatively slack conditions prevailed in the labour market as a whole.

Since adult women and young people tend to be employed disproportionately in service industries and in part-time jobs (which tend to be in the service sector), the changing industrial distribution of employment growth since 1973 might have been expected to result in slower growth for these groups and more rapid growth for adult men. Table 2-4 shows that employment growth among adult men did accelerate slightly in the 1973-79 period and youth employment grew at a markedly slower rate (as did the youth labour force).

Employment growth among adult women was, however, higher in the 1973-79 period (5.4 per cent per year) than in 1966-73 (4.9 per cent per year), as was their labour force growth (5.6 per cent versus 5.2 per cent per year). Tables 2-7 through 2-10 provide details

on the sources of the increased growth of women's employment by part-time/full-time jobs, by industry and by occupation.

Part-time jobs grew very rapidly between 1966 and 1973 (Table 2-7) but have grown at a much slower rate since then. This reflects primarily the slowdown in service sector growth; part-time employment in goods-producing industries also grew more slowly but the number of part-time jobs in these industries is small. The slowdown in part-time job creation affected all demographic groups but for adult men and women this was more than offset by increased growth in full-time jobs. In fact, adult women accounted for 43 per cent of the growth of full-time employment in 1973-79 compared with 33 per cent for adult men. Full-time employment among young people also grew more strongly since 1973 but not sufficiently to offset the slower part-time growth.

Along the industrial dimension the very high employment growth among women has occurred because women have been increasingly employed in industries where traditionally their participation has been relatively low. As Table 2-8 shows, the distribution of employment among women is still heavily skewed in favour of service-sector jobs but an increasing proportion of jobs in the goods-producing industries are being occupied by women.

To the extent that this penetration into non-traditional industries is simply the result of rising proportions of

⁴ A more detailed discussion of developments in labour markets for the highly skilled trades is contained in Chapter Nine.

Table 2-7
Part-Time/Full-Time Employment for Demographic Groups and Industries

	Average annual per cent rate of growth		Percentage contribution to employment growth	
	1966-73	1973-79	1966-73	1973-79
Total employment	2.7	3.4	100.0	100.0
Full-time	2.3	3.3	74.0	85.6
Part-time	6.9	4.0	26.0	14.4
Part-time employment	6.9	4.0	100.0	100.0
Youth	10.8	6.0	55.5	62.6
Adult women	4.8	3.6	35.9	43.5
Adult men	4.8	-2.6	8.6	-6.4
Goods-producing industries	3.7	0.2	10.2	1.0
Services-producing industries	7.6	4.7	89.8	99.0
Full-time employment	2.3	3.3	100.0	100.0
Youth	2.6	3.6	26.2	23.9
Adult women	4.6	6.7	37.1	43.0
Adult men	1.4	2.0	36.7	33.0
Goods-producing industries	0.5	2.2	10.0	25.1
Services-producing industries	3.5	4.0	90.0	74.9

Source: Based on Statistics Canada, *Labour Force Survey*.

women in traditional occupations, it does not imply that significant adjustments are taking place in the labour market.

On this issue, it is interesting to note the occupations in non-traditional industries to which women have gone. In the manufacturing industry, for example, increased female employment in 1975-79 has occurred mostly in

highly qualified, processing and material handling occupations, ranging from low-skill packaging to operating heavy equipment such as cranes (Table 2-9). In the construction industry, most women have found employment in highly qualified occupations and in construction occupations. It is also noteworthy that a significant proportion of women who entered the transportation

Table 2-8

Historical Composition of Employment of Men and Women by Industry (percentage of total industry employment)

Industry	1956		1966		1973			1979				Industry share of total employment	
	Men	Women	Men	Women	Men	Women	Per cent of female employment	Men	Women	Per cent of female employment	1973	1979	
Mining	96.6	3.4	95.9	4.1	94.3	5.7	0.2	89.8	10.2	0.4	1.4	1.6	
Other primary	95.6	4.4	89.3	10.7	87.3	12.7	2.4	78.1	21.9	3.2	6.1	5.7	
Manufacturing	78.9	21.1	78.0	22.0	76.0	24.0	15.6	73.5	26.5	13.6	22.4	20.0	
Construction	97.6	2.4	96.6	3.4	95.2	4.8	0.9	92.0	8.0	1.3	6.3	6.2	
Transportation	86.1	13.9	85.5	14.5	83.2	16.8	4.3	79.3	20.7	4.6	8.9	8.7	
Trade	70.9	29.1	67.2	32.8	62.4	37.6	18.7	57.9	42.1	18.9	17.1	17.4	
Finance, Ins.	54.9	45.1	52.3	47.7	45.3	54.7	7.5	40.7	59.3	8.2	4.7	5.3	
Services	43.3	56.7	39.6	60.4	41.0	59.0	45.1	40.3	59.7	43.7	26.1	28.4	
Public admin.	77.2	22.8	77.3	22.7	72.7	27.3	5.3	65.3	34.7	6.1	6.7	6.7	
Total	76.4	23.6	69.7	30.3	65.7	34.3	100.0	61.2	38.8	100.0	100.0	100.0	

Source: Based on Statistics Canada, *Labour Force Survey*.

Table 2-9

Occupational Contribution to Female Employment Growth by Industry, 1975-79 (per cent)

	Agriculture	Other primary	Manufacturing	Construction	Transportation, communications, utilities	Trade	Finance, insurance, real estate	Services	Public administration	Total	
										Women	Men
Highly qualified occupations		55.3	23.5	39.7	28.4	14.5	32.5	29.0	74.1	28.0	42.9
Clerical	24.1	44.7	15.9	26.0	34.9	35.7	35.7	17.1	0.7	22.9	
Sales			5.9		11.0	42.4	21.2	3.3		12.5	- 6.3
Service ¹			1.2		3.1	6.3	10.3	49.1	25.3	24.9	10.6
Primary occupations	75.9									1.6	5.4
Processing ²			39.5			1.6		1.1		6.2	30.5
Construction				34.3						0.8	3.4
Transportation					22.6					1.3	7.9
Material handling			14.0					0.4		1.9	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

This table shows the extent to which employment of women increased between 1975-79 in various occupational categories. For example, in manufacturing industries, 23.5 per cent of the total increase in employment of women occurred in highly qualified occupations.

¹Includes occupations such as waiters, chambermaids, janitors, dry cleaning occupations, etc.

²Includes occupations in metal processing, rubber and plastic processing, food and beverage processing, wood processing and textile processing.

Source: Based on Statistics Canada, *Labour Force Survey*.

Table 2-10

Historical Composition of Employment of Men and Women by Occupation (per cent composition)

Occupation	1973		1975		1979	
	Men	Women	Men	Women	Men	Women
Highly qualified occupations	61.1	38.9	60.5	39.5	59.2	40.8
Clerical	27.3	72.7	25.0	75.0	22.9	77.1
Sales	68.0	32.0	66.0	34.0	60.1	39.9
Service	49.5	50.5	50.4	49.6	46.2	53.8
Primary occupations	89.5	10.5	83.3	16.7	82.0	18.0
Processing	81.2	18.8	81.3	18.7	80.9	19.1
Construction	99.5	0.5	99.4	0.6	98.6	1.4
Transportation	97.4	2.6	96.9	3.1	94.7	5.3
Material handling	84.3	15.7	83.6	16.4	81.8	18.2
Total economy	65.7	34.3	63.6	36.4	61.2	38.8

Source: Based on Statistics Canada, *Labour Force Survey*.

industry between 1975 and 1979 have a transportation type of occupation (e.g., aircraft pilots, locomotive conductors, bus and truck drivers, etc.).

Although women are increasingly being employed outside the service sector, Table 2-10 shows that they are still heavily concentrated in the traditional clerical, sales and service occupations. Important issues for future labour market developments are whether the recently observed rate of change in the occupational distribution of women's employment would be sufficient to avoid future labour market imbalances and, if so, whether continued change at recently observed rates is likely to occur. This issue is discussed in Chapter Four.

In summary, while employment growth has been and continues to be dominated by growth in the service sector, the goods-producing industries have increasingly contributed in recent years. This is reflected in an increasing contribution to growth of blue collar jobs. Though women continue to be concentrated in the service sector and among clerical, sales and service jobs, they have been increasingly entering jobs in the goods-producing sector and in a more diverse range of occupations.

Developments in Regional Labour Markets

Regional labour force and employment developments over the past 20-year period are summarized in Table 2-11. There have been some marked changes in the regional distribution of employment growth. In particular, employment growth in the Atlantic region has risen much more rapidly in recent years than in the late 1950s and early 1960s, approaching the national average in the most recent period. Employment growth in Quebec has become weaker over the 20-year period, while that for Ontario has stayed close to the national average. As a

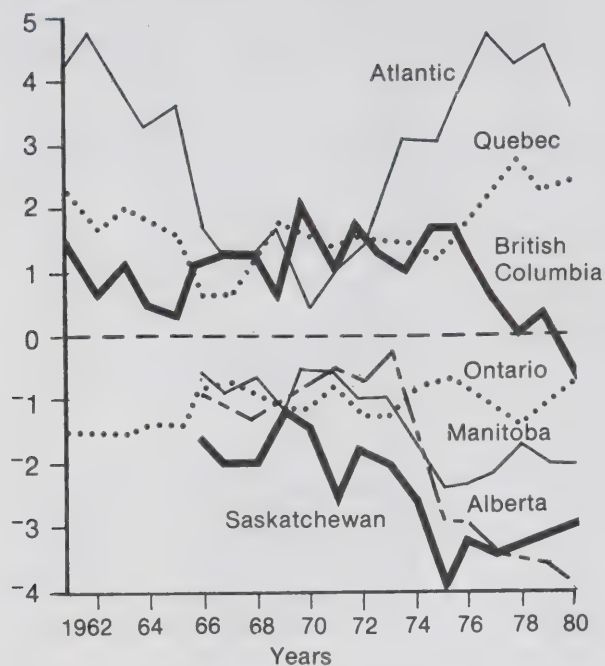
Table 2-11

Employment and Labour Force by Regions (average annual per cent rates of growth)

	1956-66	1966-73	1973-79
Atlantic			
Employment	1.9	2.2	3.0
Labour force	1.9	2.5	3.6
Québec			
Employment	2.8	2.6	2.4
Labour force	2.6	2.9	2.7
Ontario			
Employment	2.6	3.5	3.1
Labour force	2.6	3.7	3.3
Prairies			
Employment	2.6	3.1	4.1
Labour force	2.6	3.3	3.9
Manitoba			
Employment		1.7	2.3
Labour force	N/A	1.9	2.3
Saskatchewan			
Employment		0.9	3.1
Labour force	N/A	1.2	3.0
Alberta			
Employment		3.3	5.5
Labour force	N/A	3.6	5.2
British Columbia			
Employment	3.5	4.9	3.9
Labour force	3.6	5.2	3.9
Canada			
Employment	2.6	3.1	3.2
Labour force	2.6	3.3	3.3

Source: Based on Statistics Canada, *Labour Force Survey*.

Figure 2-4

Regional Differences in Unemployment Rates
(Deviation from National Rates)Source: Based on Statistics Canada, *Labour Force Survey*.

consequence of the energy and resource boom, employment in the Prairies, particularly in Alberta, has increased dramatically in recent years and employment growth has remained relatively strong in British Columbia.

In addition to employment changes, movements in regional unemployment rates have been influenced by some marked differences in regional labour force growth. In the Atlantic region, employment growth has been strong but labour force growth has accelerated more rapidly and the regional unemployment rate has risen continuously in the 1970s relative to the national average following a sustained decline in the 1960s (Figure 2-4). In Quebec and Ontario, both employment and labour force growth have tended to moderate but labour force increases have been larger than employment growth. Unemployment rates in these provinces have exhibited a slight tendency to rise relative to that for the country as a whole. In the Prairies and British Columbia, on the other hand, employment growth has outstripped growth of the work force, so that the unemployment rate has declined significantly relative to the national average. As a consequence of these increasingly diverse regional experiences in employment and labour force growth, unemployment rates have shown increasing regional dispersion since 1970, as indicated in Figure 2-4.

Table 2-12 shows the contribution to labour force growth in each of the provinces of participation rate

Table 2-12

Annual Growth Rates in the Provincial Labour Forces and their Components over the Period 1971-1980 (per cent)

Region	Labour force	Participation rate	Working-age population	Net migration ¹			Natural increase
				Inter-provincial	Inter-national	Total	
Newfoundland	4.21	1.86	2.35	-0.18	-.01	-0.19	2.54
Prince Edward Island	3.39	1.02	2.37	0.59	.09	0.68	1.60
Nova Scotia	3.09	1.16	1.93	0.20	.09	0.29	1.64
New Brunswick	3.61	1.31	2.30	0.46	.10	0.56	1.74
Quebec	2.61	0.95	1.66	-0.42	.10	-0.32	1.98
Ontario	3.19	1.03	2.16	-0.08	.53	0.45	1.71
Manitoba	2.13	0.96	1.17	-0.72	.36	-0.36	1.53
Saskatchewan	2.78	1.44	1.34	-0.61	.05	-0.56	1.90
Alberta	5.15	1.23	3.92	1.16	.48	1.64	2.28
British Columbia	3.99	0.99	3.00	0.78	.48	1.26	1.74
Canada	3.25	1.08	2.17	—	.33	.33	1.84

¹Annual average net adult migration over 1971-80 divided by mid-period adult population.

Source: Labour force and participation rate data based on Statistics Canada, *Labour Force Survey*. Net migration data based on Statistics Canada, *International and Interprovincial Migration in Canada and Population: Revised Annual Estimates of Population, by Sex and Age, for Canada and the Provinces, 1971-1976*.

changes, natural increase in the indigenous populations, and net migration from other provinces and from abroad.

Several features of this table are noteworthy.

- Growth in the working-age population was strongest in the East and the West, notably in Alberta and British Columbia. In the case of Alberta, this was partly due to a strong natural increase in the population but, importantly, in both Alberta and British Columbia net migration, much of it interprovincial, contributed powerfully to labour force growth.
- A substantial part of the interprovincial variation in labour force growth was a result of differences in the rise of participation rates, with the strongest increases occurring in Newfoundland and Prince Edward Island. In Alberta and British Columbia, where labour force growth was very strong, participation rate increases contributed relatively little.
- In three of the four Atlantic provinces net migration, again most of it interprovincial, contributed to labour force growth, notwithstanding the fact that unemployment rates, as noted above, were rising over the period of the 1970s.
- Immigrants from abroad settled primarily in Ontario, Alberta, British Columbia and Manitoba.
- As was noted earlier, unemployment rates over the 1970s grew rapidly in the Atlantic provinces, grew slowly in central Canada, and remained steady or declined in the western provinces. In other words, in the eastern part of the country the provincial labour forces grew faster than employment. In all prov-

inces except Newfoundland and Quebec, this excess labour force growth was reinforced by net in-migration. In the Atlantic provinces the migration was mainly interprovincial, while in Ontario international migration dominated. In Manitoba and Saskatchewan, net interprovincial out-migration was high enough to reduce labour force growth to the employment growth rates, while in British Columbia and Alberta rapid net in-migration served to expand their labour forces at almost the same pace as employment.

One might expect that net internal migration flows would be related to movements in provincial unemployment rates, with a pattern of rising provincial unemployment rates associated with an increased tendency toward out-migration and falling unemployment rates associated with a corresponding tendency toward in-migration. As can be seen, net migration did play an adjustment role of this kind with respect to the western provincial economies but in three of the four Atlantic provinces internal migration operated in the opposite direction to that which might have been expected.

In fact, the net in-migration to the Atlantic region as a whole which occurred in the 1970s was a reversal of the long-standing tendency for out-migration from the region. Strong employment growth undoubtedly reduced the incentive for people to move out of the region and increased its attractiveness to in-migrants. Further analysis of this question suggests that the 1971 changes in the unemployment insurance legislation may also have been an important contributing factor.

Table 2-13 looks in greater detail at interprovincial migration patterns for the 1960s and 1970s. Gross inter-

Table 2-13
Interprovincial Migration Flows¹ (annual average '000)

	In-migration		Out-migration		Net migration	
	1961-71	1971-80	1961-71	1971-80	1961-71	1971-80
Newfoundland	7.7	11.4	11.1	12.5	-3.5	-1.1
Prince Edward Island	3.7	4.6	4.3	3.9	-0.6	0.7
Nova Scotia	22.1	24.0	26.5	22.7	-4.4	1.3
New Brunswick	18.5	20.9	23.0	18.4	-4.5	2.5
Quebec	41.4	32.2	55.7	56.6	-14.3	-24.4
Ontario	104.2	95.7	80.7	102.7	23.6	-7.0
Manitoba	27.4	27.0	33.8	34.5	-6.4	-7.5
Saskatchewan	22.8	26.6	35.2	29.4	-12.4	-2.8
Alberta	52.0	81.5	49.0	61.7	3.0	19.8
British Columbia	62.0	73.7	42.7	54.8	19.3	18.9

¹For all adults and children.

Source: Based on Statistics Canada, *International and Interprovincial Migration in Canada*.

provincial migration flows — the total numbers of people moving from one province to another — far exceeded net flows.

With respect to net migration flows during the 1960s, the pattern was one of outflows, on balance, from the Atlantic region, Quebec, Manitoba and Saskatchewan with net inflows to Ontario, Alberta and British Columbia. The pattern of these migration flows changed significantly in the 1970s with net inflows of people to three of the four Atlantic provinces, continued outflows from Quebec, outflows from Ontario (a reversal of the traditional pattern), continued outflows from Manitoba and Saskatchewan and much stronger inflows to Alberta. The net movement to British Columbia remained on average about the same in the two decades.

Changes in net migration stemmed from varying combinations of changes in the flows of in-migration and out-migration. Relatively small changes in these gross migratory flows can induce substantial changes in the size and direction of net migration. In Newfoundland, for example, the decline in net outflows in the 1970s was attributable largely to a rise in in-migration, whereas in New Brunswick and Nova Scotia the swing to a net inflow stemmed largely from a decline in out-migration. Most interestingly, the increased net outflow from Quebec in the 1970s was almost entirely attributable to reduced in-migration. On average, out-migration from Quebec in the 1970s was virtually identical to that of the 1960s. In Ontario, by contrast, most of the swing to a net outflow was a result of substantially increased out-migration.

Recognition of the fact that the net changes in population flows among the provinces are responsive to changes in the pattern of both in- and out-migration suggests that there is probably much more scope for changes in the pattern of interprovincial migration than is usually supposed.

As has been noted, migration to or from a given province can change as a result of:

- a change in the numbers of immigrants from abroad settling in the province;
- a change in the numbers of in-migrants from other provinces;
- a change in the numbers of out-migrants to other provinces.

Substantial changes in the amount of net migration to or from a province can and do result from relatively small changes in the three components. The experience of the past suggests, therefore, that interregional migration flows within Canada are large, that they play an

important role in the adjustment process, and that they respond to policy changes. This issue is discussed further in Chapters Four and Eleven.

The Evolution of Labour Market Policies

In our discussion of the goals and instruments of labour market policy in Chapter One, we noted that there was increasing recognition during the 1960s, in Canada and abroad, that an important role could be played by labour market policies in alleviating non-cyclical unemployment. During that period the development of active manpower policies in the industrial countries focused on supply-side measures to increase investment in human capital through an expanded training and education system. In Canada, rising unemployment in 1969-71, associated with a rapidly rising labour force and recession, led to the development of measures to influence the demand for labour through expanded incentives to business firms and the introduction of direct employment programs. In other industrial countries, in many of which firms are prevented from laying off employees during economic downturns by either legislation or social opprobrium, increased use of demand-side measures only became widespread during the recession of 1974.

International Developments

Although valid international comparisons of labour market policy expenditures are fraught with difficulty due to differing forms of government, institutional arrangements and financing mechanisms, they can provide a useful perspective on the evolution of labour market programs in a number of countries over the past decade. Table 2-14, compiled by the OECD, shows expenditures in the late 1960s and 1970s on selected labour market policies in a number of countries relative to their GNPs.

Because institutional and financing mechanisms vary so greatly across countries, we have little confidence in comparisons of expenditure levels across countries at one point in time. In Germany, for example, expenditures on job creation policies appear to be biased upwards relative to those of Canada because they include more regional development programs and include expenditure by local governments. Another limitation is that the numbers shown for training reflect only government expenditure. In many European countries industries are much more involved in training than in Canada and if total expenditure by all participants were included, training expenditures in many of these countries would be much larger. Further, expenditures on different types

Table 2-14

Spending on Selected Manpower Adjustment Policies in Selected Countries, 1961-1977

		Per cent of GDP				Per cent of public expenditure	Unemployment rate
		Measures to improve the labour exchange	Training	Job creation and job maintenance	Total	Total	
Canada:	1968	.06	.26	.03	.35	1.05	4.5
	1969	.07	.30	.00	.37	1.09	4.4
	1977	.19	.30	.23	.73	1.82	8.1
Germany:	1968	.13	.04	.15	.32	.87	1.2
	1969	.13	.06	.16	.35	.98	0.7
	1976	.16	.19	.61	1.00 ¹	2.24 ¹	4.1
Japan:	1969	.15	.02	.08	.25	1.64	1.1
	1970	.18	.02	.07	.27	1.75	1.1
	1976	.19	.04	.07	.30	1.63	2.0
Norway:	1964	.08	.11	.11	.30	.90	2.1
	1968	.10	.10	.09	.29	.77	2.2
	1976	.01	.09	.49	.59	1.21	1.8
Sweden:	1961	.07	.09	.36	.51	1.65	1.5
	1970	.16	.20	.24	.68	1.59	1.5
	1976	.28	.72	1.10	2.16 ²	3.99 ²	1.6
United Kingdom:	1968	.04	.03	.00	.07	.10	3.3
	1970	.06	.04	.00	.09	.23	3.1
	1976	.09	.34	.38	.82 ³	1.77 ³	5.5
United States:	1969	.05	.09	.05	.19	.62	3.5
	1970	.06	.11	.05	.22	.66	4.9
	1976	.04	.26	.41	.71	2.03	7.6

¹ These totals include D.M. 430 million for "Temporary Measures to Facilitate the Reintegration of Unemployed Persons" and D.M. 10.5 million for "Assistance to Workers in Coal, Iron and Steel." These figures do not appear in any of the three sub-categories due to unavailability of detailed breakdowns.

² These totals include an amount of S.Kr. 170 million for "Incentives for the Employment of Handicapped" that does not appear in any of the three sub-categories due to unavailability of a detailed breakdown.

³ These totals include 0.45 million for "Integrated Work Force Units" that does not appear in any of the three sub-categories due to unavailability of a detailed breakdown.

Source: OECD, *Manpower and Employment Measures for Positive Adjustment*, June 1979.

of training fall under different jurisdictions in different countries, so that some expenditures on education are considered as labour supply measures in some countries but not in others. Finally, in many European countries the costs of labour market adjustment are imposed on business firms by legislation which either restricts their ability to lay off surplus workers or imposes costs, such as severance pay provisions.

Although it is therefore unwise to compare levels of expenditure across countries at a point in time, a comparison of the evolution of labour market measures across countries over time is useful and illuminating.

It is evident that with the exception of Japan, all the countries listed in Table 2-14 greatly expanded the

resources devoted to labour market policies in the 1970s. Although it is not evident in the table, the bulk of the expansion in many European countries took place in the years after 1975, following the major recession of 1974-75. In Canada, where labour force growth had been much stronger than in Europe, the increases in expenditure began somewhat earlier, particularly for job creation programs. A recent OECD study states that Canada was a pioneer in this area (OECD, 1980, 1).

Most countries, including Canada, increased their expenditures substantially on all three kinds of labour market policies — job creation, labour supply (mainly training) and measures to improve the adjustment of supply and demand (such as mobility programs and the

employment service). In most cases the largest relative increase occurred in job creation or job maintenance programs, a development which is not surprising since much of the thrust of the expansion was concerned with short-run adjustment to increased unemployment.

It is evident that several general patterns of policy response emerged in the mid-1970s.

- For most countries, income maintenance programs continued to represent the largest proportion, in terms of expenditure, of total manpower and employment measures, and in some represented the principal policy strategy, supplemented in some cases by increased training.
- In a number of countries, including the Nordic countries and the United States, job creation and job maintenance measures played a leading role. Sweden relied very heavily on such measures to promote employment in both private and public sector programs. The United Kingdom paid a partial subsidy to induce employers to retain workers who otherwise would have been declared redundant.
- Another group of countries, including Canada, Germany and the United Kingdom, adopted a more varied mix of traditional measures and new job creation and job maintenance programs. While in all of these countries income maintenance programs figure prominently, all also gave considerable emphasis to measures to improve the employment services, to training — especially important in Germany and Canada — and also to increasing support for job creation and job retention measures.
- Job maintenance measures, as opposed to job creation, were an important aspect of the anti-recession employment strategy employed in a number of European countries, including the United Kingdom, Sweden and Germany. To a considerable extent such measures involved government subsidies to private employers for maintaining redundant workers on the payroll. The Swedish and Norwegian governments also provided subsidies to producers to increase inventories during the 1975 recession. European countries have also tended to rely more heavily in recent years on regulations limiting the ability of firms to lay off workers. In contrast, in part because of the existence of a more adequate unemployment insurance system, there has been less need for such regulations in Canada.

This summary suggests that there was a noticeable tendency in the mid-1970s, particularly in Europe, to adopt policies which had substantial potential for impeding the adjustment process, inhibiting efficiency and growth over the longer run. More recently, there seems

to have been a noticeable shift away from such policies towards those which facilitate required labour market adjustment.

- Job retention and job creation measures have been reduced in Germany and France, and the United Kingdom has gradually reduced its temporary employment subsidy under which employers facing the necessity to make workers redundant received partial wage subsidies to maintain employment. Stockpiling measures in both Sweden and Norway have also been reduced.
- A shift to more targeted programs has taken place. This has been particularly the case in the United States, where job creation programs have been gradually reduced and targeted more on structurally unemployed, primarily disadvantaged, workers.
- In some countries there has been greater emphasis on private sector job creation. This trend has been evident in the United States and to some extent in Canada, where increasing use has been made of wage subsidies to raise employment in the private sector.
- Labour market policies are being linked more closely to specific adjustment targets. In the Netherlands, for example, labour market policy is specifically tied to industrial restructuring plans and the government provides a range of support for the firms involved, as well as a full array of special supports for workers affected by such reorganizations.
- Improvements are being made in employment service systems. In many countries, as in Canada, significant improvements are being made, particularly in introducing automated information disseminating mechanisms and in trying to improve the quality and quantity of labour market information for workers and employers.

There is, therefore, a discernible tendency among OECD countries to recognize that labour market policies need to be oriented much more to facilitating adjustments to a changing industrial structure and much less than they have been towards job maintenance, notwithstanding the political difficulty of doing so in a period of high unemployment.

Developments in Canada

In Canada, as noted above, the labour force absorption problem was more severe than in most countries and an earlier start was made towards using existing programs and introducing new measures to absorb the unemployed

into public and quasi-public sector jobs and training. In general, there was a heavy emphasis in this country on programs with the objective of reducing unemployment, and such efforts were heavily concentrated in areas with historically high rates of unemployment. There was a lack of focus among policies on the objective of increasing productive employment; programs tended to be used and judged primarily on the basis of their effectiveness in reducing unemployment and not on the quality of the jobs or the training which resulted.

The absorption problem, which was severe in any event, was complicated by two factors.

- As noted in Chapter One, during the 1970s, as unemployment and inflation rates tended to increase, the professional and public consensus that aggregate demand policies were sufficient to maintain “full employment” began to disintegrate, although there remained a consensus that government should maintain “full employment.”
- There was increasing concern during the late 1960s and early 1970s that unemployment in certain parts of the country and among certain groups of people remained at stubbornly high levels, whatever the state of aggregate demand in the country as a whole. Governments, as a consequence, paid increasing attention to these equity aspects of social and economic policies.

In this environment there was considerable confusion about the role of various labour market policies.

- Demand-side policies were used and justified as an instrument of fiscal policy to reduce the general level of unemployment, as an instrument of structural policy to influence the composition of labour demand across regions and, also as an instrument of structural policy, to improve the employability of target groups by providing people with job experience. The appropriate design and size of job creation measures implied by these different objectives is quite different.
- The use of such measures as instruments of fiscal policy is contingent on a decision by the government that fiscal expansion is appropriate in light of the current and prospective cyclical unemployment and inflation in the economy. It is also contingent on a decision that expenditure measures (as opposed to tax reductions) are the desirable means for delivering the expansion. Finally, to have a significant macroeconomic impact, such measures would in general have to be instituted on a much larger scale than they have been, and targeted at regions of increasing unemployment, not at regions with chronically high joblessness. Used as structur-

al policies, i.e., as labour market policies in the sense that we are using the term, the scale and design criteria are quite different, as is discussed in detail in Chapter Eight.

- Use of specific policies, such as training in occupations for which there is little prospect of strong demand and job creation policies which impede the flow of workers to high employment demand areas, can be extremely inefficient in the sense of inducing a misallocation of resources and as a consequence could well add to the structural problems or at least could perpetuate them.

An implication of our analysis and of our discussion of the role of labour market policies is that concern about inequities and regional imbalances is a legitimate reason for increasing the attention paid to demand-side policies of a structural nature. To a considerable extent, however, this problem has been dealt with by measures which were more supply-side oriented (e.g., increased use of training funds in regions of historically high unemployment) or by demand-side measures which were temporary in nature and could do nothing to resolve the longstanding economic problems of regions of high unemployment (e.g., the use of short-term job creation programs in the Atlantic region). The current state of programs and policies is dealt with in considerable detail in Part II of this Report. We illustrate the general problem with respect to the use of training and job creation funds in the sections which follow.

Training Programs. The principal federal training program, the Canada Manpower Training Program (CMTP), has a number of elements designed to achieve widely different objectives. The program contains elements for funding apprenticeship and other skill training, basic academic upgrading and language training for immigrants.

Some elements of the program (e.g., basic academic upgrading) appear to have been geared largely to addressing and overcoming fundamental labour market problems of individuals. Similarly it may be assumed that the federal contribution to apprenticeship training is geared largely to meeting the occupational needs of the economy. It is much less clear to what extent the largest component (in terms of expenditures) of federal institutional skill training is used to meet the needs of the labour market as opposed to providing fairly basic skills to improve the general employability of the unemployed, to simply take people off the unemployment rolls or to provide extended income maintenance.

In fact, the way in which funds have been allocated among provinces and among training courses suggests that the institutional skill training provided under

CMTF has been geared to a considerable extent to meeting the latter three objectives. The brief of the Department of Manpower and Immigration to the Senate Committee on Poverty in 1969 indicated that allocations were made on the basis of the distribution of the labour force and the extent of "economic need." The brief defined economic need in terms of the incidence of unemployment and poverty, and maintained that, to a large extent, poverty accompanied unemployment.

A later Department document (CEIC, October 1980) argues that the occupational needs of provincial economies were introduced as criteria into the allocation of funds increasingly during the 1970s, accompanied by strengthening of the Manpower Needs Committees, principally after 1972. It also states, however, that notwithstanding the stated intention of the federal government to reinforce the employment objectives of the program in 1977, the actual allocations have continued to be dominated mainly by the earlier allocation patterns, based to a considerable degree on unemployment rates.

By the late 1970s it had become increasingly apparent that the mechanism for allocating funds under CMTF was resulting in substantial training in the eastern provinces for low level skills already in excess supply while serious chronic skill shortages appeared to be surfacing in central and western Canada. Issues related to training are considered in detail in Chapter Nine.

Job Creation. The federal government has introduced a number of direct and indirect incentive schemes in recent years designed to stimulate employment in specific regions and industries and among certain groups of people. For the most part these measures have involved grants and tax incentives to business firms and are administered by the Department of Regional Economic Expansion and the Department of Industry, Trade and Commerce, although grants were also made to municipalities between 1958 and 1968 under the Municipal Winter Works Incentive Program.

In 1970, confronted with the prospect of rising unemployment and the view that use of macroeconomic policy instruments was constrained by the prospect of accelerating inflation, the government established the Local Initiatives Program (LIP). As originally designed, LIP had the objective of alleviating seasonal unemployment and was originally introduced as a temporary measure. The persistence of historically high unemployment throughout the decade resulted in continued and extended use of short-term job creation programs, both to alleviate unemployment throughout the year (Canada Works and Community Development Projects) and to alleviate summer unemployment among students (OFY and Young Canada Works).

In addition to these programs, which have been broadly targeted among people (the unemployed) although focused particularly at high unemployment areas, a further direct job creation initiative, the Local Employment Assistance Program (LEAP), was established in 1973 to provide support for long-term job creation projects. Its main objective is to increase the self-sufficiency of workers who are unable to compete for regular employment and are chronically unemployed.

Faced with increasing skepticism as to the utility and scope for further measures of direct job creation but perceiving a continued need to adopt measures to alleviate unemployment, the government instituted an Employment Tax Credit under legislation passed in 1977. Introduced originally for a three-year term, the Act was extended for a year in March 1980.

Thus direct job creation measures have now been in place for a decade. After a sharp increase in scale early in the decade, they have varied in size depending on economic conditions and on the perceived need of the federal government to engage in expenditure-cutting exercises.

Although these programs (except for LEAP) were designed and considered as short-term measures to reduce unemployment in periods of temporary slack in the economy, they have in fact become a permanent feature of the labour market policy landscape. As is discussed in detail in Chapter Eight, their continued use is being questioned on several grounds.

- Because programs were very loosely targeted, they have not only provided jobs for the unemployed but have also drawn additional people into the labour force.
- Because of the very short planning horizons and inherent instability of job creation programs, they have had no permanent impact on demand conditions in regions of high unemployment and have tended to cycle people back to unemployment with replenished UI eligibility.
- The requirement that federal job creation funds be used to generate incremental employment led to solicitation of projects from outside the planning processes of local government. Incrementality has to some extent been purchased at the cost of relatively low value of output.
- Program funds have increasingly been targeted to parts of the country with historically high unemployment rates. These regional unemployment rate differentials are of long-standing duration and relate to factors which are much more deep-seated than can be dealt with by short-term demand meas-

ures. In this crucial respect, therefore, the programs are simply inappropriate. Indeed, if the programs had been used to achieve counter-cyclical objectives they should have been targeted primarily to parts of the country in which unemployment rates had increased most during a downturn. Regions with high levels of unemployment are not necessarily those affected most severely by fluctuations in economic activity.

Although job creation programs have undergone continuous review and modification since their inception in an attempt to overcome these difficulties, their basic characteristics remain the same.

Conclusions

In most industrial countries, including Canada, labour market policies expanded in size and scope during the 1970s in response to rising rates of unemployment. More recently it has been recognized in some European countries that many of the measures implemented were either inappropriate ways of achieving the objective they were designed to attain or were impeding desirable longer-run adjustments in the labour market. This is resulting in a process of reorientation and/or rationalization of policies and programs in many countries.

In Canada the current mix of labour market policies and programs was developed and implemented in an environment of extraordinary labour force growth stemming from increases in both working-age population and participation rates, the latter being particularly large among adult women. Though employment growth was generally strong, the unemployment rate drifted upward over the 1970s — an increase which was concentrated among young people and adult women. Undoubtedly, the upward drift in youth and adult female unemployment has been related in significant measure to the limits in the ability of the economy to adjust to a rapidly changing mix of workers and to absorb large increases in

the labour force except under conditions of very rapid economic growth such as occurred in the mid-1960s and in 1973-74.

In these circumstances it is not surprising that labour market policies had a “holding-tank” orientation designed to provide something for people to do — either increased training paid for by training allowances or short-term jobs through such temporary job creation measures as LIP or subsidized employment in low-growth areas of the country.

While the “holding-tank” orientation was explicit in some programs, e.g., LIP, in others it resulted from a use of programs for purposes other than those for which they were intended, e.g., the use of low-level training as a means of taking people out of unemployment and/or of extending income maintenance. In turn the tendency to use programs for purposes other than those for which they were intended was enhanced by the practices of making programs national in scope and of negotiating funding levels of training programs in advance with provincial governments. A process which allocates short-term job creation and training funds to the eastern regions on the basis of their share of national unemployment is virtually guaranteed to produce an orientation towards simply absorbing the excess labour supply with very little impact on output and income per worker over a longer-run horizon.

Notwithstanding the fact that many labour market programs have been used in inappropriate ways, the resulting social costs in terms of misallocation of labour may not have been large given the generalized conditions of labour surplus which have prevailed. Chapter Four suggests, however, that the nature of our problems in the 1980s will be quite different and that much greater emphasis must be placed on establishing a set of labour market policies which alleviate regional, occupational and demographic bottlenecks and enhance our ability to achieve high employment growth without accelerating inflation.

Chapter Three

The Unemployed in Canada

Historically the design of improvements in the performance of labour markets has focused primarily on the unemployment experience of participants. The Task Force has expanded the foregoing perspective in two respects. First, we emphasize the importance of understanding the employment as well as the unemployment experience of the subgroup of the labour force that endures unemployment. It is our belief that policies to enhance output must include a careful examination of the nature of the demand for labour. Second, we have examined both employment and unemployment from a long-term perspective. That is, rather than focusing on one or two years of data, we have been able to develop a set of longitudinal data and to track the labour market experience for several years for those experiencing unemployment.

At this point in time government intervention in labour markets is influenced to a considerable extent by reported unemployment rates. Even when disaggregated by region, age, sex and so on, these rates may provide a most superficial indicator for policy prescriptions. In this chapter we outline briefly the results of labour economists who have struggled with the need for a more meaningful understanding. Our main objective, however, is to report the initial findings from a very comprehensive data system that we have analyzed with the purpose of examining unemployment in Canada.

In order to prescribe policies to alleviate unemployment, several questions have to be answered.

- How is the incidence and duration of unemployment distributed among the population by age, sex, skill, and region?
- What is the experience over time of individuals affected by unemployment?
- Is unemployment related more to the characteristics of the individuals experiencing it or to the attributes of their jobs?

Answers to such questions require an understanding of the unemployment experience and all its complexities

at a disaggregated level. In the past, dealing with the problem from this perspective has been inhibited for three reasons. Statistics have involved a very high level of aggregation; historical analyses have tended to be static in nature; and even where dynamic analyses have been employed, it has only been possible to study the employment and unemployment experience of workers for comparatively short periods of time, often less than one year. It will be difficult to remedy these difficulties. The data we present later in this chapter represent only a modest beginning.

Recent Perceptions of the Unemployment Experience

Analyses of labour force behaviour in the 1970s have largely dispelled the traditional view of unemployment as a state in which a certain section of the labour force remains for long periods of time with little chance of finding work. Instead, evidence suggests that unemployment is more appropriately viewed as a “stocks and flows” process in which many people move over time between being unemployed, employed and out of the labour force. In this context, unemployment is a state that is experienced by a much larger part of the labour force. At any point in time there is a “stock” or “pool” of unemployed persons, but people are continually joining this pool as a result of layoffs, quits or entry into the labour force, while others are continually leaving the pool as a result of being hired, recalled, or leaving the labour force.

We noted in Chapter One, for example, that the stock of unemployed in Canada averaged about 800,000 persons throughout the last five years. Flows into and out of unemployment were very high. In the 1976-79 period, each month about 3.4 per cent of the labour force became unemployed, and each month approximately one-third of those unemployed either found jobs or dropped out of the labour force.

In the analysis of unemployment we first need to recognize that the rate of unemployment (a static measure of the “stock” or “pool”) can change because of

changes in either the number of persons becoming unemployed (turnover) or average length of time people are unemployed (duration).

$$\begin{array}{lcl} \text{Unemployment} & = & \text{Turnover} \quad \times \quad \text{Duration} \\ \text{rate} & & \text{(per cent)} \quad \quad \text{(average time} \\ \text{(per cent)} & & \text{per unit time)} \quad \text{unemployed)} \end{array}$$

Hence, a particular unemployment rate could indicate that many people with high turnover rates are experiencing unemployment for periods of short duration, or that a smaller number of people are unemployed for long periods.

Table 3-1 illustrates the relative contribution of the turnover and duration components in the 1976-79 period for the three principal demographic groups in Canada.

Table 3-1
Decomposition of Unemployment Rates

	Unemployment rate (per cent)	Turnover per month (per cent)	Average duration of unemployment (months)
Youth	13.7	5.9	2.3
Adult women (25+)	7.2	3.0	2.4
Adult men (25+)	4.7	1.8	2.6

Source: Based on Statistics Canada data.

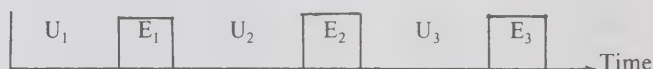
These data illustrate that youth unemployment is characterized by much higher turnover and somewhat shorter duration than that for adults. Adult women have a significantly higher turnover rate than adult men and an average duration of unemployment similar to that of young people.

Since a given unemployment rate could represent various combinations of duration and turnover experiences, many interpretations exist regarding the relative importance of the two components. Some analysts have considered that unemployment represents primarily situations where many people are experiencing unemployment for periods of short duration (high turnover rates). Those holding this view would consider that among the subgroup within society enduring unemployment, it is a more-or-less random event. Other analyses have considered that unemployment is much more concentrated in a few individuals who are out of work for a large fraction of time. Those holding the latter view would also contend that the unemployment experience is far from random and is related to the characteristics of the individual involved. Hence, the combination of the duration and turnover effects and its variation with sub-

groups of the labour force and with levels of aggregate demand has been a prime area of focus for those attempting to understand how governments can more effectively attack the unemployment problem.

In the early 1970s, the extensions of the understanding of the unemployment problem focused on the importance of turnover in explaining unemployment (Hall, 1972). High unemployment rates among subgroups (e.g., women, youth, minorities and so on) were found to be more adequately explained by higher turnover than by longer durations of individual spells. It was found, for example, that most of the differences in unemployment rates between blacks and whites in the United States were associated with the turnover, not duration differences. The comparatively high unemployment rates for women were found to result from a turnover phenomenon; the duration of individual unemployment experiences was actually less than it was for men.

More recent analyses (Frank and Freeman, 1978), however, have concentrated on explaining unemployment differences within subgroups of the population. In analyzing National Longitudinal Survey data on the United States for the 1970-71 period, it was possible to put together a sequential unemployment (U) and employment (E) history for subgroups of the population. The individual employment history could appear as indicated in below.



The examination of intragroup differences was found to be much less of a turnover phenomenon than the intergroup differences we described earlier. Differences in duration explained as much of the intragroup variances as did differences in turnover.

In Canada, McIlveen and Sims (1978) have also examined the flow components of unemployment, using Annual Work Pattern Survey data for 1964 and 1973. Their findings are consistent with the results of U.S. studies in indicating that turnover and not duration explain variations in unemployment between demographic groups.

In a recent analysis, Clark and Summers (1979) have focused on the concentration of unemployment. Although finding high turnover (short durations accounting for a very high percentage of the occurrences of unemployment), they discovered that the total time spent unemployed resulted to a disproportionate extent from those out of work for a large fraction of the time. For example, two-thirds of the unemployment

experienced by men aged 45 to 59 was a result of unemployment spells lasting more than six months.

If unemployment is concentrated in a subgroup that systematically and repeatedly endures long spells, then targeted government assistance could be the most appropriate approach to reducing unemployment. Past experience of long duration unemployment would provide an appropriate guideline for focusing assistance. In a more recent presentation of their work, Clark and Summers (1980) suggest the use of wage subsidies as a non-inflationary approach to alleviate unemployment:

It is our view that a program of wage subsidies structured to spur employment growth, targeted to the concentrated, long-term unemployed, and channelled through the private sector, offers an attractive alternative to current policy.

A recent Canadian survey on youth labour market experiences (CEIC, 1980) also found evidence supporting the view that a minority of youth suffering long-duration joblessness accounts for a significant proportion of total reported youth unemployment.

These studies, which focus on the importance of the duration component, contrast with the views expressed by some economists that unemployment is characterized predominantly by rapid turnover and short-duration spells (Dornbusch and Fischer, 1978). This latter view that unemployment is randomly distributed over many individuals would suggest a quite different prescriptive solution — that government policies to ensure the more rapid matching of unemployed individuals and job vacancies would be most effective in reducing unemployment.

From the foregoing brief overview of recent findings, we conclude that the key reason that there has not been more widespread agreement on the unemployment experience is the lack of systematically collected, organized and analyzed data. All references that we have described have examined very short-term information — frequently less than one year in total. What is needed, in our view, is the development of long-term longitudinal data on unemployment occurrences. This data base could then be analyzed to track the unemployment and employment experiences of individuals, the behaviour by industry and location, the importance of demographic characteristics, and so forth.

The Nature of Unemployment

To obtain a better understanding of the structure of unemployment in Canada and the characteristics of the unemployed, the Task Force utilized UI and record-of-employment data and constructed an extensive historical data file on individuals experiencing unemployment.

This file contains employment and unemployment information for up to eight years for a sample of individuals. The sample analyzed represents 10 per cent of those who experienced at least one spell of unemployment that was accompanied by an unemployment insurance claim in the period 1972-1980. This data set essentially examines the experience of workers when they are employed and not employed. It is based on a restricted definition of not being in the labour force in that unless people are not able to work for a specific reason they are included in the unemployed when not working. We have only begun to explore the potential of this extremely useful data base but present here some preliminary findings.

The foregoing data base differs from the familiar *Labour Force Survey* in the two respects. First, since individuals have to experience at least one period of employment followed by a spell of unemployment to be included in the sample, youth and re-entry women are under-represented in our sample. Second, our definition of unemployment is much more inclusive than the *Labour Force Survey* (because of our restricted definition of the state of not being in the labour force). In the latter respect, our work is very similar to that of Clark and Summers.

The Task Force is examining the characteristics of seventeen diverse Canadian labour markets. In this chapter we will report some selected statistics from six of the seventeen regions. The regions presented here include metropolitan areas (Halifax, Montreal and Toronto); areas that are partly metropolitan and partly rural (Winnipeg and northern Manitoba, Saskatoon and northern Saskatchewan) and one area that is rural (northeast New Brunswick). Some of the more important initial observations follow.

Concentration

In all regions we found that the labour force could be dichotomized into two subgroups: a subgroup that essentially never endured unemployment, which we have designated the “permanent” sector; and a subgroup that endured unemployment frequently and with great regularity, which we have designated the “temporary” sector. In making this distinction, we are referring to unemployment and employment experiences. This division does not necessarily correlate with the quality of jobs or the characteristics of workers.

If we consider that significant unemployment relates to being unemployed on average more than one week per year, then the percentage of the labour force in the temporary sector is as illustrated in Table 3-2.

Hence for labour markets that are urban or have a large urban component, approximately one-fifth of the labour force could be considered to be in the temporary

sector. In the one rural region (northeast New Brunswick), unemployment occurred in one-half the labour force.

Another very important characteristic that is related to the concentration of the unemployment experience is the high level of turnover among those enduring unemployment. In all six regions over 90 per cent of new jobs were subsequently lost by those who secured employment after having been unemployed. This is strong evidence that unemployment is endured on many occasions by the subset of the labour force that experiences it.

Table 3-2
The Temporary Sector

Region	Per cent of labour force enduring significant unemployment ¹
Halifax	20
Northeast New Brunswick	53
Montreal	19
Toronto	17
Winnipeg and northern Manitoba	19
Saskatoon and northern Saskatchewan	21

¹Significant unemployment is defined in this table as being either
a) two spells of unemployment greater than four weeks duration for those in the labour force more than four years; or
b) one spell of unemployment greater than four weeks for those in the labour force less than four years.

If we were to adopt a broader definition of significant unemployment, the percentage would increase somewhat. For example, for the five regions having approximately 20 per cent of the labour force in the temporary sector when significant unemployment was defined based on four-week spells, the per cent in the temporary sector would be about 30 per cent if significant unemployment were defined based on one-week spells.

Source: G. Glenday and G. P. Jenkins. "The Unemployment Experience of Individuals," paper prepared for the Task Force.

Table 3-4
Indicators of Regional Disparity in Unemployment Hardship

Region	Average unemployment rates	Unemployment rates relative to Toronto	Fraction of time unemployed ¹	Fraction of time unemployed relative to Toronto ¹
Halifax	7.7	1.4	.38	1.4
Northeast New Brunswick	17.0	3.0	.48	1.7
Montreal	8.5	1.5	.33	1.2
Toronto	5.7	1.0	.28	1.0
Winnipeg and northern Manitoba	5.6	1.0	.31	1.1
Saskatoon and northern Saskatchewan	4.2	.7	.34	1.2

¹Applied to subset of labour force enduring unemployment.

Source: Based on Statistics Canada data and G. Glenday and G. P. Jenkins, "The Unemployment Experience of Individuals," paper prepared for the Task Force.

The average frequency of the repeated occurrences varies somewhat by region. As illustrated by the following data, the frequency in northeast New Brunswick is higher than that in the urban labour markets. If we define a major unemployment occurrence to last more than four weeks, then the frequencies by region were as indicated in Table 3-3.

Unemployment Rates

Earlier we indicated that unemployment rates provide very limited evidence with respect to the hardship of individuals experiencing unemployment. In Table 3-4, using metropolitan Toronto as a basis for comparison, we illustrate that the unemployment rates suggest much greater disparity between regions than a more meaningful indicator, the fraction of time spent unemployed (i.e., from the perspective of the individuals, interregional differences in time spent unemployed are much more appropriate).

Table 3-3
Frequency of Major Unemployment Occurrences

Region	Average years between major unemployment spells
Halifax	2.3
Northeast New Brunswick	1.5
Montreal	2.6
Toronto	3.0
Winnipeg and northern Manitoba	2.7
Saskatoon and northern Saskatchewan	2.4

Source: G. Glenday and G. P. Jenkins. "The Unemployment Experience of Individuals," paper prepared for the Task Force.

Hence, although the unemployment rate in northeast New Brunswick was three times that in Toronto, the fraction of time spent unemployed was 70 per cent higher.

Differences in the levels of wages and salaries between regions also provide an indication of the disparity in hardships across regions. In this regard, we have only limited information. We found some evidence, however, that in regions with high unemployment rates, such as northeast New Brunswick, a substantial portion of those enduring unemployment have high-paying jobs.

Table 3-5 illustrates, for those enduring unemployment, the fraction of the work force receiving wages above the maximum insurable earnings while employed.

While we cannot comment on the distribution of wages for the unemployed who were paid less than the maximum insured earnings, the above results illustrate great stability between regions in the fraction (in the order of 40 per cent) earning above the maximum insured earnings.

In sum, there is evidence that unemployment rates can overstate disparities in the hardship of unemployment of individuals between regions. The Task Force suggests that more meaningful multiple indicators be developed.

Demographic Characteristics

The Task Force has examined, to a limited extent, the demographic characteristics of the unemployed. Although much further work is required, the initial results were somewhat surprising in indicating that the characteristics of the unemployed were not significantly different from the overall labour force.

Table 3-5
Wages of the Temporary Sector

Region	Proportion of jobs with wages above the maximum insurable earnings
Halifax	.36
Northeast New Brunswick	.38
Montreal	.39
Toronto	.41
Winnipeg and northern Manitoba	.35
Saskatoon and northern Saskatchewan	.43

Source: G. Glenday and G. P. Jenkins. "The Unemployment Experience of Individuals," paper prepared for the Task Force.

- The proportion of women in the unemployed was only slightly above that in the labour force as a whole. In two of the six regions, the proportion of women in the labour force was higher than the proportion in the unemployed. This concurs with evidence from the *Labour Force Survey*.
- The average age of the unemployed was similar to that of the labour force. It must be remembered that our data exclude youth and re-entry women who have never been unemployed.

Seasonal Factors

Seasonal industries contributed significantly to unemployment in all regions. Table 3-6 illustrates, however, the percentage of unemployment contributed by four selected seasonal industries — forestry, mining, fishing, and construction varied significantly between regions.

Construction was the seasonal industry that contributed to unemployment to the greatest extent in all regions. For example, 37 per cent of the unemployment spells in northeast New Brunswick and Saskatoon originated in this sector.

The Hard-Core Unemployed

Many government concerns with respect to the labour force relate to a subgroup of the unemployed that spend a very high percentage of their time in unemployment.

In the Task Force we have focused in particular on labour force participants who were employed less than 30 per cent of the time. This subgroup of the unemployed represented about 6 to 9 per cent of those

Table 3-6
Unemployment in Selected Seasonal Industries

Region	Per cent of unemployment spells originating in selected seasonal industries
Halifax	35
Northeast New Brunswick	63
Montreal	16
Toronto	21
Winnipeg and northern Manitoba	32
Saskatoon and northern Saskatchewan	42

Source: G. Glenday and G. P. Jenkins. "The Unemployment Experience of Individuals," paper prepared for the Task Force.

experiencing unemployment in the four regions that were urban or had a substantial urban population (Winnipeg and northern Manitoba; and Saskatoon and northern Saskatchewan). The rural area of northeast New Brunswick was an anomaly where the subgroup employed less than 30 per cent of the time made up 18 per cent of those experiencing unemployment.

In some respects those experiencing very low rates of employment differed significantly from the rest of the unemployed (i.e., those employed more than 30 per cent of the time but still averaging at least one week of unemployment per year). The following were the main differences for the subgroup with low rates of employment.

- It contained a much higher percentage of young persons.
- In most cases the skill level was lower.
- There was a much shorter period of attachment to the labour force.

As anticipated, those spending a high percentage of time unemployed (i.e., labour force participants employed less than 30 per cent of the time), when compared with the rest of the labour force, had longer durations of unemployment and shorter durations of employment. However, although the average duration of unemployment spells was only marginally greater (in the order of 10 per cent), the duration of employment spells was markedly shorter (these durations were less than 50 per cent of those for the remainder of the labour force).

Hence our preliminary data would suggest that concerns with respect to the difficult-to-employ should focus not only on the unemployment experience but also on the employment experiences.

Another important preliminary result of relevance to the problems of the difficult-to-employ relates to the comparative durations of initial and subsequent spells of unemployment. Our preliminary evidence does not support the belief that those experiencing employment difficulties will consistently endure unemployment spells of long duration. The evidence illustrated in Table 3-7 suggests that if a worker experiences a very long spell of unemployment (defined as being longer than 26 weeks), it is likely that his next spell will be considerably shorter.

Hence our results, which examined employment and unemployment over a very long period, question seriously the belief that unemployment is highly concentrated

Table 3-7

Duration of Initial and Subsequent Periods of Unemployment

Regions	Average duration of long spells (weeks)	Average duration of subsequent unemployment spells (weeks)
Halifax	42.8	19.3
Montreal	43.6	19.6
Toronto	45.6	18.1
Winnipeg and northern Manitoba	42.2'	17.3
Saskatoon and northern Saskatchewan	42.7	17.7

Source: G. Glenday and G. P. Jenkins. "The Unemployment Experience of Individuals," paper prepared for the Task Force.

in a subgroup of the labour force that continuously spends a very high percentage of the time unemployed.

Rural and Urban Differences

The Task Force research that examined employment and unemployment experiences across regions revealed major differences between the characteristics of urban areas (or regions containing a substantial urban population) and rural areas. The rural areas that had high unemployment rates differed from urban areas in the following respects.

- The average fraction of time that individual workers were unemployed was significantly greater.
- A higher proportion of the labour force endured repeated spells of significant unemployment.
- The unemployed included a higher proportion of men.
- Seasonal industries contributed to unemployment to a much greater extent.
- Average skill levels were lower.

These differences suggest the importance of tying prescriptions to labour market problems to the particular characteristics of individual regions.

Conclusions

This preliminary analysis of the nature of unemployment in Canada suggests a number of conclusions.

- The unemployment rate, and variations in the unemployment rate across regions, are not suffi-

cient indicators either of the severity of unemployment experienced by individuals or variations in the regional nature of unemployment.

- In many regions only a minority of individuals ever experience unemployment.
- The characteristics of jobs in a region tend to have an important influence on the amount of unemployment experienced by individuals.
- There is a marked difference in the unemployment experienced in predominantly urban and predominantly rural regions.

Our research suggests that much more effort should be devoted to understanding the characteristics of the employment experiences of workers who encounter recurring spells of unemployment. A more detailed analysis could reveal great potential for increasing the percentage of time employed. We found, for example, that in some regions two employees were required to produce the annual output of one worker. Alleviating this problem could involve policies directed at the nature and structure of employment rather than unemployment.

A major issue for labour market policy is whether there exists a definable group of individuals who chronically and systematically experience unemployment. On this issue we find that there is a relatively small group for whom unemployment is severe in the sense that on

average they endure unemployment of long duration. Our analysis has not yet reached the stage where we are able to determine whether this group can be defined in terms of a small set of characteristics. Preliminary analysis suggests, however, that the average duration of the current unemployment spell may not be a very accurate predictor of further chronic unemployment. It may not, therefore, be an efficient indicator to use as a basis for targeting employment programs.

Our data suggest that employment experiences should be separated into two categories — those that are permanent and those that are temporary (i.e., characterized by recurring periods of unemployment). At this time, we are not able to separate the impacts of the characteristics of jobs and of workers in contributing to intermittent employment. In Part II of this Report the major differences in the economic impacts of the two types of employment will be discussed.

The new insights into the Canadian unemployment experience result from research conducted on behalf of the Task Force by Glenn P. Jenkins and Graham Glenday. The findings reported in this chapter represent only a beginning to exploiting the potential that exists for using the longitudinal historical data we have developed with respect to Canadian employment and unemployment experiences. We have emphasized that the results should be considered as preliminary. In the long run, further development of the information is essential to quantifying the differential economic impacts of alternative labour market policy prescriptions.

Chapter Four

Labour Markets in the 1980s

Chapter Two noted that the economic and labour market environment has changed in several important ways in recent years. In general, the nature of the changes in demand for labour was such as to facilitate the adaptation of the economy to a rapidly changing structure and rate of growth of labour supply. Notwithstanding the broad similarity of trends in labour supply and demand, the unemployment rate has drifted upward appreciably over the past decade and our ability to achieve simultaneously the goals of price stability and high employment has deteriorated to a considerable extent.

There has been increasing concern that future changes on both the demand and supply sides of the labour market may make it increasingly difficult for Canada to achieve good economic performance. Following are some of the most significant concerns.

- The labour demands of a changing industrial structure will be increasingly difficult to accommodate from a labour supply which is growing more slowly and changing dramatically in composition.
- If the changing regional distribution of economic activity is not accompanied by sufficient labour mobility, severe labour shortages will arise in some parts of the country while severe surpluses will develop in others.
- Growth of high opportunity, high productivity industries may be constrained by an inability to attract workers from industries in decline.
- The effects of technological change in some industries and occupations may generate substantial changes in the structure of demand for workers, with the result that certain groups, such as women office workers, may experience particular difficulty in obtaining and keeping employment.
- Adequate numbers of workers may not be available for the construction of energy-related mega-projects.

- Difficulty will be experienced in absorbing large numbers of women and Native people into the work force.

In this chapter we assess the extent to which the Canadian economy appears to be confronted with problems such as these, and examine the consequent nature of needed adjustments in the labour market. From this analysis we draw some implications for the direction of changes which appear to be required in the nature and scope of labour market policies.

Although many of these issues relate to specific industrial or geographical sectors of the economy or to particular demographic groups, all will be powerfully affected by general economic conditions in Canada, which in turn are strongly influenced by developments in the rest of the world, particularly the United States.

The starting point for our analysis is therefore a set of projections for the economy as a whole which estimates the growth path of the major economic variables to 1990 corresponding to alternative assumptions about major factors which will influence Canadian economic performance. These projections do not provide a forecast of economic activity. Rather, they give us a range of outcomes within the bounds of which the Canadian economy seems most likely to operate on average over the decade, given information currently available. As such they provide an internally consistent framework at the national level as a base for analyzing the prospective structure of labour markets.

Macroeconomic projections provide an essential overview of likely trends in labour demand and supply as well as more detailed information on the demand side with respect to the evolution of employment by industry and on the supply side with respect to the evolution of the demographic composition of the labour force. Some important conclusions about the nature of labour markets in the 1980s can be drawn on the basis of projections at the economy-wide level.

We begin our analysis by outlining the nature of the projections and their implications for demand for labour

in total. We then derive the implications of the demand projections for employment by industry and occupation, outline prospective developments in labour supply and draw together the implications of the aggregate demand and supply analysis.

Issues related to the prospects for labour market imbalances along regional, occupational and demographic dimensions are then addressed. Analysis of these issues requires that a different method of analysis be used and that the information contained in the macro projections be supplemented by more detailed data from other sources.

The reason for this is simply that existing macroeconomic models do not contain mechanisms to distribute production of goods and services and the associated demand for labour by region, or by sex or age group. Moreover, they provide no information on the number of new labour force entrants to different occupations. Because they do not explicitly consider regional, occupational and demographic aspects of labour demand and supply, no explicit consideration is given to the adjustment problems and processes of labour markets at these less aggregated levels.

At the economy-wide level, mechanisms are built into our projection procedures to ensure that the overall demand for labour does not exceed the supply — to ensure, in other words, that the unemployment rate does not become negative. These mechanisms involve accelerating wage rate increases combined with some increase in labour force participation in times of strong demand for labour. In periods of weak demand, on the other hand, the unemployment rate rises, labour force participation tends to rise more slowly and wage increases tend to become smaller.

Similar processes, along with unspecified processes of geographic or occupational mobility, are simply assumed to exist to ensure that unemployment rates within industries, regions, occupations and demographic groups do not become negative. In other words, labour shortages are assumed to be eliminated, as are “shortages” of capital and other factors of production, by rises in the price of labour which induce a simultaneous increase in the supply of workers to the region or industry and a reduction in the demand. Such processes are, of course, in continual operation throughout the economy.

For many goods and for some inputs into the production process, such as capital, strong demand in one region or industry will result in goods or capital being supplied from other regions so that strong demand and excess supplies do not co-exist in the economy. Labour, however, is not freely mobile in the short run across

regions and occupations, so that situations of extremely strong demand, with rapidly rising wage rates, and surpluses can co-exist across regions and across occupations for substantial periods of time. Thus, in the short run, excess demand for skilled workers in a given sector may be eliminated more from a reduced level of production in the industries to which those workers are an essential input than from an increase in labour supply. At the same time there can be high unemployment among workers who do not have those skills.

For our purposes it is not sufficient to subsume the adjustment processes in particular labour markets. A primary purpose of labour market policies is to facilitate more smoothly functioning labour markets by increasing mobility from regions and industries where demand and productivity are low to expanding sectors with a minimum of wage pressure. It is essential, therefore, that we assess as far as possible the implications of our projections for excess supplies and demands for labour across regions, occupations and demographic groups. To the extent that we can do this, we can draw some conclusions about appropriate future directions for labour market policies. Successful implementation of such policies will contribute to reducing inflationary pressure in the economy and to stimulating higher growth in output and employment relative to total labour supply.

We then report the results of our analysis of the requirements for labour market adjustment in response to:

- the changing proportions of men and women in the labour force;
- the changing regional structure of the economy; and
- changing occupational requirements.

We cannot predict in detail the specific processes by which excess demands will be eliminated, but we can indicate in general terms the nature of the policy response required to ensure that availability of labour will not impede realization of our economic potential.

The final section of this chapter draws together the principal conclusions of our analysis and outlines their implications for labour market policies.

In addition to this “top-down” or macro approach, we have conducted a more detailed analysis of a number of industries which appear to be confronted with major changes in technology or in the structure or size of demand for their output. These industries include construction, finance, insurance and real estate, hospitality, automotive manufacturing, machinery manufacturing, and electronics. They are representative of those indus-

tries which appear to be facing major changes in the nature and/or size of their work forces. Because these studies were incomplete at the time this report was being written, we were unfortunately unable to use them to supplement the information obtained from our macro-economic analysis. As is noted in Chapter Five, such detailed industry studies are a necessary component of an adequate economic intelligence system.

Recent and Prospective Economic Developments

To assess the nature and scope of labour market imbalances in the 1980s, we begin with projections of the growth of demand for labour in the economy as a whole and by industry sector. Since the level and growth of labour demand depends on the level and growth of output of goods and services and on growth in labour productivity, our starting point is a set of projections of economic activity which generate simultaneously the projected levels of the main economic aggregates (GNE, inflation, employment, productivity, etc.).

The course of economic activity is strongly influenced by the economic environment in the rest of the world, particularly in the United States, and by the course of economic policy in Canada. Underlying any set of projections, therefore, are a number of assumptions relating to these factors.

With respect to Canadian economic policy, we assumed no change in the set of policies currently in place. This is a conventional assumption in medium-term analysis and reflects two considerations.

- The course of policy is impossible to predict. Economic policies change as events unfold. Indeed our projection horizon is long enough for future changes in both macroeconomic policies and structural measures, such as labour market policies, to have an appreciable impact on the course of economic activity.
- The aim of many projection exercises, including the one reported here, is in fact to assess the extent to which policy changes appear to be required to facilitate better economic performance than is projected given existing policy settings.

With respect to the external environment, there is considerable uncertainty about the prospects for the world economy. In the United States, uncertainty and controversy exist about the impact of the series of measures — tax and expenditure cuts and changes in the nature and scope of government regulation of business — recently proposed by the new administra-

tion. Moreover, the administration's proposals are still being considered by Congress and the final shape of the policy package remains to be determined.

Given these uncertainties, it is probable that in making projections over a period as long as five or ten years, there will be a fairly wide margin of error associated both with the assumptions and the projections based on them. Recognizing this, we have prepared a number of projections corresponding to different plausible assumptions about such factors as the course of domestic energy prices, the timing of some major investment projects, and economic growth in the rest of the world. We view them not as a forecast but as an outline of a range of plausible outcomes providing a basis for examining prospective labour market problems.

Although our projections were completed in September 1980, before the announcement of the National Energy Policy, we had included a scenario which assumed a relatively rapid rise in energy prices. In addition, the Minister of Finance released a medium-term projection for the Canadian economy at the time of the Budget which incorporates the energy price profile of the NEP. This projection is broadly similar to one of our scenarios reported below, and for purposes of comparison we include details of the Department of Finance projection in our tables.

We have based our projections on the following major assumptions.

- Economic growth in the United States and the rest of the world will pick up in 1982 and be sustained at a moderately strong pace throughout the decade.
- There will be no further international price shocks as a consequence of further substantial OPEC increases or shortages of other raw materials.

In what follows we analyze the implications for labour markets of two projections corresponding to relatively fast growth (Alternative A in Table 4-1) and slow growth in Canada (Alternative B in Table 4-1).¹ We also analyze the implications of a third scenario labelled Alternative C. In Tables 4-1 and 4-2 Alternative C is the medium-term projection of the Department of Finance (October 1980) and in subsequent tables it represents an alternative, more extreme view about the industrial or regional distribution of employment. This more extreme view was included because we wished to test the sensitivity of labour market conditions in the 1980s to a broad range of possibilities.

¹ The Task Force prepared six alternative scenarios on the macroeconomic outlook. Space and time prevent us from conducting a complete analysis of all combinations of possibilities. The two scenarios outlined here were chosen because in our judgement they cover a reasonable range of plausible outcomes.

Table 4-1 shows recent and projected movements in some major economic indicators. As a basis of comparison in assessing the projections, it is useful to recall some of the key characteristics of recent economic experience.

- Growth in real Gross National Expenditure was high in the years to 1973 but has been substantially lower since then.
- Inflation, as measured by the Consumer Price Index, has tended to rise, particularly in the period since 1973.
- Productivity growth averaged some 2.5 per cent annually between 1956 and 1973 but has been dramatically lower in subsequent years.
- The labour force grew rapidly throughout the period.
- Employment growth was high but has been lower than the rate of increase in the labour force in recent years.
- Corresponding to the relatively lower growth in employment than the labour force since 1966, the unemployment rate has tended to drift upward over time.

Our projections for both alternatives A and B suggest that following the current period (to the end of 1981) of cyclically weak activity, economic growth will be moderately strong through the mid-1980s and through the second half of the decade. Nonetheless, in both projections growth is low relative to that which occurred in the 1960s and early 1970s. To some extent this reflects the assumed moderate growth in the rest of the world, the constraints placed on stabilization policies by continuing

high rates of inflation, and the continuing impact of the adjustment to higher relative energy prices in Canada. It is also important to note that the slower growth paths in the future reflect a more slowly growing working-age population than has occurred in the past 20 years.

Inflation remains at historically high levels throughout the decade but gradually declines throughout the period. The projections assume that economic recovery in Canada and abroad will not be so strong as to generate generalized excess demand in product and labour markets, so that inflation is tempered by more slowly rising import prices, stronger growth in productivity than has recently been experienced, and continued moderation in wage settlements.

Recent developments, particularly with respect to inflation, suggest that the projections shown here may be too optimistic and that the projected rate of inflation may well be too low and projected real growth too high, for the 1980-85 period.

The unemployment rate is projected to remain at historically high levels, reflecting the continued operation of the longer-run factors noted in Chapter One. Our ability to achieve lower unemployment rates will depend on our ability to achieve higher rates of productivity growth, lower rates of inflation, and more smoothly functioning labour markets.

Our projections assume that productivity growth will recover partway from its very low level in recent years but that it will not regain the relatively high levels of the 1960s. As mentioned earlier, there is great uncertainty surrounding the causes of the productivity decline. In part it can be attributed to the relatively weak growth of

Table 4-1

Summary of Major Economic Indicators — Actual and Projected (average annual per cent rates of growth)

	GNE			CPI (1971=100.0)			Productivity			Labour force			Employment			Unemployment rate (end of period)		
	A	B	C ¹	A	B	C ¹	A	B	C ¹	A	B	C ¹	A	B	C ¹	A	B	C ¹
1956-66	5.0			1.9			2.4			2.6			2.6			3.4		
1966-73	5.6			4.3			2.5			3.3			3.1			5.5		
1973-79	3.7			9.0			0.5			3.3			3.2			7.5		
1980-85	3.2	2.7	2.4	7.4	8.4	9.2	1.0	0.8	0.2	2.0	2.0	2.2	2.2	1.9	2.2	6.6	7.9	7.7
1986-90	3.7	3.6	—	5.9	6.1	—	1.5	1.6	—	1.8	1.8	—	2.1	1.8	—	4.9	7.2	—

¹Medium-term projection of the Department of Finance (see source).

Source: Historical data based on Statistics Canada data. Projections for Alternatives A and B developed by Task Force. Alternative C is from Dept. of Finance, *Prospects of the Canadian Economy, 1980-85*, 1980.

demand in the post-1973 period, but it seems clear that there were longer-run, deeper-seated factors at work as well.² The uncertainty surrounding the reasons for the recent productivity decline suggests that we treat projections of this variable with a considerable degree of caution.

Reflecting this uncertainty, medium-term projections differ substantially in their estimates of the productivity growth associated with a given rate of growth in real GNE. The Finance projection, for example (Alternative C), is more pessimistic than ours regarding productivity growth. As a consequence, although real GNE growth is similar in the Finance projection and our slow growth projection, the rate of growth in employment is higher in the Finance scenario.

The productivity issue is critical both because growth in output per worker represents the rate at which real income per worker is rising in the economy and because higher rates of productivity growth make it easier to achieve good price performance.

In addition to productivity growth, growth in the average standard of living in the economy (measured by real GNE per capita) is influenced by the rates of growth of the working-age population and of the labour force participation rate. Our population and labour force projections are discussed in some detail in the next section of this chapter. As is evident from Table 4-1, we are projecting a significant decline in the rate of growth of the labour force. The slower growth of the labour force is largely attributable to slower growth of the working-age population; the participation rate is project-

ed to continue to increase so that, given our projection of total employment, the employment-to-population ratio will continue to rise.

Table 4-2 shows the recent and projected growth of the factors determining increases in the Canadian standard of living. Productivity growth recovers somewhat, particularly in the latter half of the decade, from its low level in recent years but remains substantially below the rate of growth observed before 1973. Labour supply factors contribute more strongly than they did between 1956 and 1966 but to a smaller extent than they did between 1973 and 1979. The reduced rate of growth in labour supply is largely attributable to a more slowly growing working-age population (discussed in Section IV), although the participation rate also grows somewhat more slowly than it has since 1973. Our projection of a decline in the unemployment rate contributes slightly to the growth of GNE per capita, contrary to the experience since 1966, when a rising unemployment rate reduced growth in real GNE per person.

As a consequence of these productivity and labour supply trends, real GNE per capita is projected to grow at rates of about 2.2 per cent and 2.8 per cent in the first and second halves of the decade respectively. These rates are of the same order of magnitude as occurred in 1956-66 and 1973-79 but much below those experienced between 1966 and 1973, when high productivity and labour supply growth combined to produce an average increase in real GNE per person of 4 per cent per year.

From these observations two important conclusions follow.

- Growth in aggregate real GNE is not an indicator of growth in living standards, so that a decline in economic growth does not necessarily imply a

² These are dealt with at some length in the Seventeenth Annual Review of the Economic Council of Canada (1980) and in a recent paper of the Department of Finance (October 1980).

Table 4-2
Contribution of Various Factors to Increase in Real GNE Per Capita (average annual rate of growth)

	1956-66	1966-73	1973-79	1980-85	1986-90
Productivity factor ¹	2.22	2.58	0.56	1.02	1.48
Labour supply factors	0.41	1.46	1.92	1.22	1.29
Contribution of:					
Change in ratio of working-age population to total population	-0.04	1.02	1.02	0.31	0.16
Change in participation rate	0.38	0.69	1.08	0.77	0.77
Change in unemployment rate	0.07	-0.25	-0.18	0.14	0.36
GNE per capita	2.63	4.04	2.48	2.24	2.77

¹Includes international factors related to changing prices of Canadian imports and exports.

Source: Historical data based on Statistics Canada data. Projections for 1980-85 and 1986-90 developed by the Task Force based on Alternative A (fast-growth scenario).

decline in the growth of the standard of living. For example real GNE growth averaged 5 per cent per year in 1956-66, compared to a projected rate of about 3 per cent in 1980-85, but the difference in the GNE per capita growth rate is much smaller (2.6 per cent and 2.2 per cent respectively).

- The decline in labour supply growth is virtually certain to occur, so that improvement in living standards of Canadians will be much more dependent on productivity growth in the future than they have been in the recent past. Effective policies, including labour market policies, which contribute to achieving higher productivity growth will therefore be of more critical importance in the future than they have been in the past two decades.

The historical evolution of the composition of aggregate demand and its projected composition are shown in Table 4-3. The past two decades have been characterized by a rising share of expenditures being devoted to consumption and relative stability in the shares devoted to investment and government expenditure.

Our deficit in international trade declined significantly relative to GNE in real terms between 1966 and 1973. Since then it has increased substantially and comprised 3.5 per cent of GNE in 1979.

Over the course of the next decade our projections suggest that the share of GNE devoted to consumption is likely to decline in line with slowing population growth; that continued government restraint will result in a decline in the share of government expenditure; and

that the share of business investment in total expenditure will tend to increase significantly, reflecting large energy investment and restructuring in the manufacturing sector. Our projections also imply an improvement in the international competitive position of Canadian industry so that exports rise relative to imports in the second half of the decade. A rising share of business investment and exports implies faster relative growth in the goods-producing sectors of the economy than has occurred over much of the recent past.

As noted above, our projections are based on the assumption of moderate growth in the U.S. economy. If the U.S. administration succeeds in achieving its objective of higher non-inflationary growth, then the share of exports in Canadian GNE would be enhanced and growth in the goods-producing sector of the Canadian economy will be greater than is shown in these projections. On the other hand, there is increasing concern that significant elements of Canadian manufacturing industry, such as the auto industry, will have difficulty in adapting products to changed demand patterns and that as a consequence a rising share of Canadian demand will be met by imports. To the extent that this occurs it will impede the improvement in net exports which we project over the 1980s and could result in significant dislocation of labour.

The Composition of Employment Growth

Analyses of past and future trends in labour demand usually concentrate on changes induced by economic

Table 4-3

Gross National Expenditure (1971 constant dollars) (percentage composition)

	Personal consumption expenditure			Government expenditure			Investment									Net exports			GNE ²		
							Residential			Non-residential construction and machinery and equipment											
	A	B	C ¹	A	B	C ¹	A	B	C ¹	A	B	C ¹	A	B	C ¹	A	B	C ¹			
1966	58.5			22.3			4.2			15.4			-2.2						100.0		
1973	59.3			21.8			5.5			13.6			-1.5						100.0		
1979	62.7			20.2			4.2			14.8			-3.5						100.0		
1985	61.6	61.5	64.1	19.6	19.6	18.5	3.6	3.7	3.5	17.7	18.0	16.4	-3.5	-3.6	-3.3	100.0	100.0	100.0			
1990	59.9	59.7	—	18.6	18.5	—	2.9	3.0	—	18.9	19.2	—	-1.4	-1.6	—	100.0	100.0	—			

¹Medium-term projection of the Department of Finance (see source).

²Categories do not sum to 100.0 exactly due to omission of changes in inventories.

Source: Historical data based on Statistics Canada data. Projections for Alternatives A and B developed by Task Force. Alternative C is from Dept. of Finance, *Prospects of the Canadian Economy, 1980-85, 1980*.

growth. For example, employment increased on average by 268,000 jobs per year over the 1973-79 period and is projected to increase by between 205,000 and 242,000 jobs per year over 1979-85. These estimates do not take into account the fact that job openings are also created to replace those leaving the labour force because of change in participation rates, retirement or death (i.e., labour force attrition). The total number of job openings, therefore, has two components, one arising from industrial growth (net change), the other from labour force attrition. We estimate that, on average, about 185,000 job openings occurred annually during 1973-79 because of labour force attrition. This number is expected to increase to some 200,000 per year over the 1979-85 period.

On the supply side, the same principle applies. The change in labour supply over a period of time is the net result of the total number of people joining the labour force less those leaving the labour force. Therefore the total number of job openings should be compared with the total number of people joining the labour force, and not with the net increase in the labour force.

For analyzing labour market pressure at the aggregate level, the net changes in employment and labour supply are relevant because the unemployment rate is affected by net changes in demand and supply. At the aggregate level, therefore, taking replacement demand and labour force entries and withdrawals explicitly into account does not add new information to our understanding of the evolution of pressure on the labour market, and it is net changes in employment and in the labour force which are recorded in most tables.

At the occupational level, however, the only information available on sources of supply relates to the number of people entering occupations from the education or

training systems. In order to assess developments at the occupational level, the information on supply has to be compared with total job openings on the demand side (i.e., demand from growth plus replacement demand).

In our examination of occupational imbalances, we take explicitly into account both these sources of labour demand to compare estimates of total job openings with estimates of numbers of labour force entrants. In all other sections in which we examine aggregate labour market development, we use estimates of net changes in supply and demand.

Industrial Composition

The implications of the changing structure of output for employment growth and its composition are shown in Table 4-4. The contribution of the service industries to overall employment growth is expected to be significantly lower in the future than it has been over much of the recent past, with the contribution of goods-producing industries correspondingly higher. Much of the relatively large contribution of goods-producing industries occurs in the primary sector of the economy and is attributable to renewed growth in the fishing industry, slowdown in productivity increases in the agricultural sector with concomitant increases in employment, and renewed growth in the mining sector.

As noted, there is particular uncertainty surrounding the employment prospects in manufacturing. With respect to the construction industry, the employment growth in alternatives A and B is lower than that projected in other medium-term projections (a detailed examination of the construction sector has been done for the Task Force).

Table 4-4
Industrial Composition of Employment Growth (per cent contribution to overall employment growth)

	1956-66	1966-73	1973-79	1980-85			1986-90	
				A	B	C	A	B
Primary Goods	-16.6	-5.4	2.9	4.1	3.7	2.5	6.5	6.8
Mining	0.6	1.0	2.1	1.0	0.9	3.2	3.0	3.4
Other Primary	-17.2	-6.4	0.7	3.1	2.8	-0.7	3.5	3.4
Secondary Goods	32.5	20.4	19.4	23.7	22.4	16.5	18.9	19.9
Manufacturing	23.7	15.9	12.2	17.7	16.2	8.8	12.2	12.7
Construction	8.8	4.5	7.2	6.0	6.2	7.7	6.6	7.1
Services	84.1	85.0	77.7	72.3	73.9	81.0	74.6	73.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Historical data based on Statistics Canada, *Labour Force Survey*. Projections developed by Task Force.

Accordingly, Table 4-4 includes a third projection (Alternative C) of the industrial composition of employment growth to 1985 which has manufacturing employment growing considerably more slowly than in projections A and B, reflecting the concerns noted above. Construction employment is projected to grow more rapidly than in scenarios A and B, reflecting the assumption that the labour intensity of non-residential construction will be greater than in those projections.

The changing profile of employment growth by industry has implications for the occupational structure of demand discussed immediately below, as well as for the employment profiles of men and women.

Occupational Demand

Requirements for workers in different occupations and at different skill levels depend on the industrial distribution of employment and, within industries, on the extent to which technological change is causing a change in the skill or occupational mix. The only available information on employment by occupation within each industry relates to a single point in time, so that we do not know the extent to which changes in the skill and occupational mix within industries have occurred in recent years. Nor do we have information from our aggregate projections of the economy on future changes in the skill and occupational mix within industries. Our industrial sector analyses provide some indication as to the extent to which technological change is likely to affect the skill

and occupational mix within the industries we have examined. For the economy as a whole, however, because we lack better information, we are forced to assume that the occupational and skill mix within industries will be constant over our projection horizon. Thus, our projections of occupational demand reflect only the effects of the changing industrial composition of employment growth.

Table 4-5 shows estimates of how occupations and different skill levels are distributed across industries, given the 1979 distribution of employment by industry.

- *Highly qualified occupations* (generally those requiring a university degree) are heavily concentrated in personal and business services and to a small extent in manufacturing. Personal and business services include the health and education sectors of the economy as well as firms offering services to business, such as consulting, engineering, accounting, and law.
- *Highly skilled occupations* are concentrated in manufacturing, construction and, to a large extent, the trade sector of the economy. The trade sector includes a large number of firms engaged in repair and maintenance of machinery, so that such occupations as auto mechanics are included here, as are large numbers of highly skilled sales people employed in wholesale and retail distribution. The manufacturing sector employs relatively large numbers of highly skilled processing occupations such as machinists and tool and die makers, and the con-

Table 4-5
Distribution of Employment by Industry and Skill

Industry	Percentage distribution of occupational skills				
	Highly qualified	Highly skilled	Medium skilled	Low skilled	Total employment
Agriculture	0.1	0.1	9.5	6.3	4.7
Other primary	2.0	1.4	5.8	1.4	2.6
Manufacturing	11.5	11.7	18.2	31.7	20.0
Construction	2.6	14.8	3.5	3.0	6.2
Transportation, communications, utilities	5.0	6.4	14.6	7.2	8.7
Trade	3.7	37.3	12.4	11.4	17.4
Personal and business services	57.7	18.8	16.7	32.6	28.4
Finance, insurance, real estate	7.7	4.2	8.9	2.3	5.3
Public administration	9.7	5.2	10.4	4.0	6.8
Goods-producing	16.2	28.0	37.0	42.4	33.5
Services-producing	83.8	71.9	63.0	57.5	66.6
Total economy	100.0	100.0	100.0	100.0	100.0

Source: Estimates by Task Force using structure of COFOR model.

struction industry also has a very large proportion of highly skilled tradesmen, such as welders, plumbers and pipefitters.

- *Medium-skilled occupations* tend to be more evenly distributed across all industries in the economy. They include many clerical occupations.
- *Low-skilled occupations* tend to be heavily concentrated in manufacturing and in personal and business services. In the manufacturing industry, many assembly and processing operations require large numbers of low-skilled operatives. Similarly, personal and business services establishments use large numbers of low-skilled personnel, such as clerks, janitors, and attendants.

Since our projections of employment growth by industry suggest a convergence in the growth rates of services and goods-producing industries over the next ten years, we would expect some shifting of the occupational requirements away from those prevalent in service industries (particularly from those such as teaching and health care for which demand depends on population structure and growth) and towards those prevalent in mining, manufacturing and construction. This in turn suggests a slowing of requirements for highly qualified occupations and a relative increase in demand for occupations which are used intensively in goods-producing industries.

Table 4-6 shows estimates for the four skill groups of the occupational composition of their contribution to total employment growth in the recent past and their projected contribution to growth in the 1980s.³ Since

³ For purposes of comparison we have also included in these tables the pattern of growth projected by the Canadian Occupational Forecasting Program (COFOR) of the Department of Employment and Immigration. These projections are broadly similar to those of the Task Force. Notable differences are the higher projected growth among engineering occupations, slower growth for teachers and significantly higher growth among highly skilled construction trades. Details of the COFOR projections are contained in a CEIC document (February 1981).

Table 4-6
Occupational Composition of Employment Growth (per cent contribution to overall employment growth)

	1972-79	1980-85				1986-90	
		A	B	C	COFOR-85	A	B
Highly qualified occupations	19.1	13.2	13.0	14.4	11.6	13.9	14.0
Highly skilled occupations	27.0	24.4	24.5	27.7	28.9	27.6	27.3
Medium skilled occupations	23.8	29.6	29.6	28.0	26.0	30.0	30.3
Low skilled occupations	30.2	32.7	32.9	30.0	33.4	28.5	28.4
Total employment	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Estimates made by the Task Force using COFOR model and different macro scenarios. COFOR-85 data from Dept. of Employment and Immigration, *Occupational Requirements to 1985*, February 1981.

these estimates take no account of technological change, they can be viewed only as broad indicators of orders of magnitude.

As expected, the projected contribution to employment growth of highly qualified occupations declines significantly from the level of the 1970s. It is noteworthy that medium- and low-skilled jobs are estimated to have accounted for some 55 per cent of new jobs created between 1973 and 1979 and that this proportion is projected to increase during the 1980s, a reflection of the projected relative strength of goods-producing industries. This observation is of interest because it is frequently suggested that the numbers of lower-skilled jobs either have declined or are likely to decline significantly in the future.

Tables 4-7 and 4-8 show more detailed estimates of recent and projected contributions to total employment growth among highly qualified and highly skilled occupations, assuming a fixed occupational mix within individual industries. Since these are occupations for which a substantial amount of training is required, they are of greatest interest and importance for labour market policy.

Among highly qualified occupations (Table 4-7) the following are the most striking prospective developments.

- As a group, highly qualified occupations are likely to contribute less to total employment growth in the future than they have in the recent past.
- Their declining relative importance is largely attributable to declining relative growth in the health and teaching occupations, which are strongly influenced by population growth. The projected declining relative growth of managers may also be related to a certain extent to slower service industry growth.

Table 4-7

Occupational Composition of Employment Growth — Highly Qualified Occupations (per cent contribution to overall employment growth)

Occupation	1972-79	1980-85				1986-90	
		A	B	C	COFOR-85	A	B
Managers, administrators and related occupations	8.2	5.3	5.2	5.2	5.2	5.4	5.6
Engineers, architects, system analysts, occupations in the physical and life sciences and in mathematics and related fields	1.7	1.9	1.8	2.0	2.5	2.4	2.6
Occupations in the social sciences and related fields (lawyers, social workers, economists, sociologists, librarians, etc.)	1.8	1.5	1.5	1.6	1.3	1.7	1.7
Teaching and related occupations	5.2	2.8	3.1	3.6	1.3	2.4	2.3
Doctors, dentists, veterinarians and other health diagnosing and treating occupations	1.2	0.8	0.7	0.9	0.6	0.6	0.6
Other highly qualified occupations	1.0	0.9	0.7	0.9	0.8	1.4	1.2
Total highly qualified occupations	19.1	13.2	13.0	14.4	11.6	13.9	14.0

Source: Estimates made by the Task Force using COFOR model and different macro scenarios. COFOR-85 data from Dept. of Employment and Immigration, *Occupational Requirements to 1985*, February 1981.

Table 4-8

Occupational Composition of Employment Growth — Highly Skilled Occupations (per cent contribution to overall employment growth)

Occupation	1972-79	1980-85				1986-90	
		A	B	C	COFOR-85	A	B
Occupations in architecture and engineering other than architects and engineers (draughtsmen, architectural and engineering technologists and technicians)	1.6	1.2	1.2	1.3	1.5	1.5	1.5
Occupations in health other than diagnosing/treating (nurses, physiotherapists, etc.)	5.2	4.6	5.0	5.2	4.7	2.9	2.9
Highly skilled occupations in sales (technical salesmen and advisers, insurance salesmen, real estate salesmen, etc.)	10.2	8.3	8.2	9.8	10.0	11.4	10.6
Highly skilled construction trades occupations (construction electricians, plumbers, carpenters, etc.)	3.6	4.7	4.7	5.9	7.1	5.5	5.8
Highly skilled processing occupations (tool and die makers, machinists, mechanics, etc.)	4.9	4.5	4.4	4.5	4.4	5.2	5.2
Other highly skilled occupations	1.5	1.0	1.0	1.0	1.1	1.1	1.2
Total highly skilled occupations	27.0	24.4	24.5	27.7	28.8	27.6	27.3

Source: Estimates made by the Task Force using COFOR model and different macro scenarios. COFOR-85 data from Dept. of Employment and Immigration, *Occupational Requirements to 1985*, February 1981.

- Conversely, relative growth in the engineering and scientific occupations is expected to increase, particularly in the second half of the decade, reflecting the projected growing importance of goods-producing industries and of large, energy-related construction projects in this period.⁴

In the period to 1985 the projected contribution to employment growth of highly skilled occupations (Table 4-8) differs significantly between scenarios A and B on the one hand and alternative C and COFOR scenarios on the other.

- Projections A and B show a lower contribution to growth to 1985, followed by a substantial pickup in the late 1980s. The other scenarios show sustained growth to 1985. The difference is largely accounted for by a smaller estimated contribution to growth of highly skilled sales occupations in projections A and B.
- Highly skilled processing occupations—the category which includes many skilled manufacturing trades—are projected to contribute somewhat less to employment growth in the years to 1985 than has recently been the case. This category also includes occupations in the trade sector such as mechanics and it is the reduced trade sector growth which accounts for the decline. In the manufacturing industry, highly skilled trades are projected to contribute to employment growth to about the same extent as they have in the recent past. Growth in these occupations is projected to be relatively strong after 1985.
- The strongest relative growth among the highly skilled groups is projected to occur in the construction trades, reflecting the strong projected growth in non-residential construction.
- The projected relative growth in demand for engineering technologists and technicians is suspiciously low. This may be an area where our techniques have been unable to capture the effects of technological change and the employment requirements of new and rapidly growing industries. Available qualitative evidence suggests that employment growth is likely to be stronger than projected here.

In summary, employment growth in the 1980s seems likely to be more highly concentrated in the goods-pro-

ducing industries, particularly in construction, than in the recent past. Among occupations, the limited information available suggests relatively slower growth among highly qualified occupations, with the notable exception of engineering and scientific occupations; a sustained contribution to growth among highly skilled trades, notably those related to construction; and a somewhat stronger contribution to growth among medium- and low-skilled occupations. We have some confidence in our projection of a tendency towards slower overall growth in highly qualified occupations because this is related primarily to the impact of a more slowly growing population on the health, education and personal services sectors. Generally, however, our occupational projections are based on extremely limited information. Studies conducted for the Task Force suggest that the skill requirements in some important sectors such as parts of the manufacturing industry and office jobs in all industries may change dramatically as a result of technological change.

In order to assess the prospects for imbalances in particular occupations, supply factors must be jointly considered along with the demand projections outlined here. We analyze prospective imbalances for selected groups of occupations later in this chapter, in which we consider the implications of replacement demand along with labour requirements emanating from industry growth.

Labour Supply Conditions

The sources of labour force growth in the recent past were discussed in Chapter Two. It was noted that labour force growth was dominated by demographic developments in the 1960s, with participation rate changes playing an increasingly important role in the 1970s. The contribution of net immigration was substantial in the earlier years of the post-war period but has been declining over time. As in the 1960s, the labour market of the 1980s will be powerfully affected by some fundamental demographic changes but these will be operating in a different direction from those of the recent past.

Demography

The recent trend towards marriages later in life and the increased participation of women in the labour force have been accompanied by a sharp decline in both the number of births and the birthrate during the past two decades. The current general fertility rate (the birthrate per 1,000 women aged 15-49) is approximately half that realized during the baby boom of the 1950s and is below the level required to ensure a constant population. It seems unlikely that the factors which led to this low

⁴ A recent study of the engineering requirements for known megaprojects, which takes account of design and pre-construction requirements as well as those involved in construction and operations phases, also concludes that requirements are likely to increase dramatically in the period 1985-90, the average annual requirements being approximately double those of the 1980-85 period (Foster Research and Govier Consulting Services Ltd., 1981).

level will be reversed during the 1980s, and we have assumed that age-specific fertility rates will remain at their 1979 levels throughout the projection period.

Throughout the 1970s a relatively large proportion of the female population was moving into the principal childbearing years (age 20-34), mitigating to some extent the decline in the number of births per woman. Increases in this population group will moderate in the 1980s as the post-war baby boom generation will already have entered the principal childbearing ages. As a consequence a decline in the total number of births should occur even if age-specific fertility rates remain unchanged.

Although age-specific death rates are also assumed to remain constant during the 1980s, the changing composition of the population will lead to an increase in the overall death rate by 1990.

For purposes of our projections, we have assumed that net immigration to Canada will be maintained at a level of 50,000 per year. This assumption was chosen not because we considered it to be appropriate or likely but simply because it approximates the average estimated level of net immigration over the past five years. The entire analysis of our report is predicated on the assumption that Canada's labour needs will be met primarily from within the indigenous population and that the order of magnitude of net immigration will not be substantially different from current levels. Deviations from our assumed level of the size likely to be encountered would not have a significant effect on the Canadian population.

The implication of these assumptions is that the population of Canada will grow at an average annual rate of approximately 1 per cent during the 1980s, reaching about 26.3 million in 1990 compared with 23.9 million in 1980.

For labour market analysis, the relevant population to examine is not the total population but rather the "civilian source population" — the number of people age 15 and over. Except for possible variations in international migration, both the size and age/sex structure of the source population are known with virtual certainty for the next 15 years. Although the sex structure of the source population does not vary significantly, the age structure shows considerable variation over time, reflecting the movement through successive age categories of the baby boom generation. Through the period of the 1980s, this group will pass into the prime labour force age category (25-54 years).

Thus the prime age group will increase its share of the population from 51.8 per cent in 1980 to 55.9 per cent

by 1990, while the younger (15-24 years) group's share will decline from 24.9 per cent to 19.7 per cent.

Participation Rates

Given the size and age/sex structure of the population, the supply of labour depends on the extent to which the source population desires to participate in the labour force. Simply expressed, the labour force is equal to the source population multiplied by the proportion of the source population either employed or searching for employment (the participation rate).

Labour force participation decisions of those in the source population depend on a wide variety of economic and sociological factors. These factors have been comprehensively described and intensively examined in a paper recently released by the Department of Finance (Ciuriak and Sims, 1980).

The Task Force essentially accepts the views and conclusions of that analysis and, as noted below, our participation rate projections are similar to those of the Department of Finance paper.

By and large our participation rate projections (shown in Figure 4-1) assume a continuation of recent trends; they are not significantly affected by differences in the rate of economic growth of the orders of magnitude contained in our different scenarios.

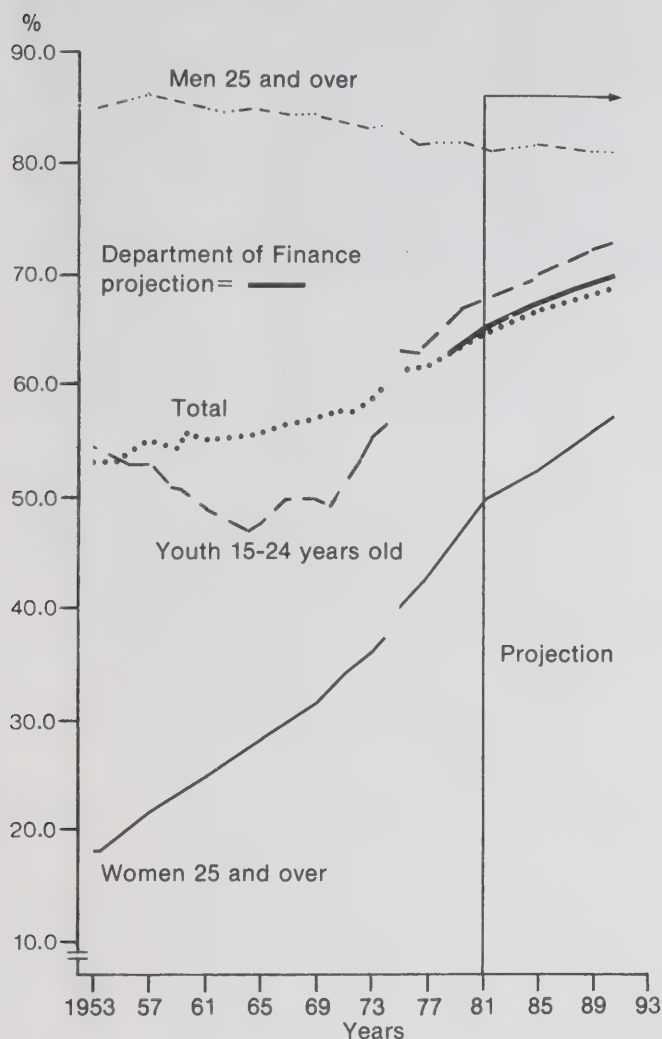
Participation rates have grown most rapidly in recent years among young people and adult women. For both of these groups we assume a continuing trend to higher participation rates.

In the case of young people, participation rates are expected to grow at a slower rate than in recent years, as the recent decline in secondary and post-secondary education enrolment rates are assumed to level off and stabilize.

- Educational enrolment rates depend on the expected returns to higher education and on labour market conditions. Some analysts of enrolment rate trends in the United States have concluded that the returns to higher education are likely to increase in the 1980s and lead to higher enrolment rates (Freeman, 1977). In Canada, however, increases in enrolment rates are considered highly unlikely, (Zsigmond et al., 1978).
- In both the United States and Canada, however, analysts suggest that enrolment projections are highly tentative in nature so that there is considerable uncertainty as to the future course of enrolment rates and hence of labour force participation among young people.

Figure 4-1

Participation Rates Among Certain Demographic Groups, 1953 to 1990



Note: The historical series break in 1975, the year in which major revisions were made to the labour force survey. The most abrupt break occurs in the case of the less-than-25 group. Prior to the revisions, this group consisted of 14-24 years olds. With the revisions, it was redefined to comprise 15-24 years olds.

Sources: Historical data based on Statistics Canada, *Labour Force Survey*. Projection developed by Labour Market Development Task Force. Department of Finance projection from *Participation Rate and Labour Force growth in Canada*, April 1980.

For adult women we have no reason to think that the trend to higher participation will change significantly. Accordingly, we assume a continuing increase in participation rates. By 1990 our projections imply that over 75 per cent of women aged 25-54 will be in the labour force.

Because of the many uncertainties surrounding the development of participation rates among women, it has always been difficult to project future changes. Forecasts of female participation rates in the past have consistently underestimated their growth. The projection used in this analysis should, therefore, be viewed with some caution. More widespread implementation of affirmative action programs, improved support services such as day care, and increased flexibility in work arrangements could further increase the participation rate of women.

Participation rates of men have varied much less than those of women, particularly for the prime age group (25-54), of which close to 95 per cent participate in the labour force. The participation rate for older men (aged 55 and over) has declined slowly but steadily and we assume it will continue to decline at a slow rate. This in turn reflects the assumption that the trend to earlier retirement will continue, resulting from improved private sector pension benefits combined with public pension and old age security plans.

As we move through the 1980s, this assumption could become less and less realistic. Indeed, continued increases in longevity and slowing in functional aging, in conjunction with the real and perceived effects of inflation on incomes derived from pensions and savings, may increase the desire of older people to remain in the work force. These factors, accompanied by pressure to retain the skills of these workers in the labour force, by removal of mandatory retirement legislation, and possibly by increasing use of flexible work arrangements, may slow the withdrawal of older workers. The 1977 Retirement Survey (Coffin and Martin, May 1977) showed that 15 per cent of those who were forced to retire because of age would have preferred to retire later, and approximately 45 per cent of those retirees who would have retired early (given adequate pensions) would have taken a part-time job after retirement.

Both alternatives A and B have participation rate projections that are quite close to those contained in a recent Department of Finance study (Ciuriak and Sims, 1980) in which recent and prospective participation behaviour was intensively examined. A comparison of projection A with that of the Department of Finance is shown in Table 4-9.

Implications for Labour Force Growth

The effects of demographic and participation rate behavior on labour force growth are shown in Table 4-10. There is no significant difference in projected

Table 4-9

Comparison of Participation Rates
for Major Demographic Groups

	1980	1985	1990
Youth (15-19)			
Projection A	.548	.582	.611
Finance Projection		.580	.593
Adult men (20+)			
Projection A	.816	.813	.809
Finance Projection		.815	.808
Adult women (20+)			
Projection A	.499	.543	.596
Finance Projection		.556	.611
Total			
Projection A	.641	.665	.691
Finance Projection		.672	.697

Source: Projection A developed by Task Force. Department of Finance Projection from *Participation Rates and Labour Force Growth in Canada*, April 1980.

labour force growth between alternatives A and B; marked slowdown in the rate of growth of the labour force is anticipated in the 1980s in both cases.

Our assumption of 50,000 net immigrants per year (of whom about 40 per cent are assumed to enter the labour force) implies that the contribution to labour force growth from immigration will be lower on average than that observed over the period since 1973, but similar to its contribution since 1976. Our participation rate projections imply a contribution to labour force growth slightly smaller than that experienced over the past decade.

The most significant change in the 1980s will result from the slowdown in growth of the domestic source population. This slowdown is virtually certain to occur, as it depends only upon the age composition of the Canadian population in 1979 because people born after 1979 will not be of labour force age during the 1980s and the mortality rate of people of labour force age has

been fairly stable and is expected to remain so. Here, more than anywhere, we can observe the effects of the aging of the baby boom generation. By 1980 most of the baby boom population had already reached working age, and the consequent slowdown in source population growth, shown in Table 4-10, has a large impact on our expectations for labour force growth during the 1980s.

The slowdown in the rate of labour force growth will result in a substantial shift in the age and sex composition of the labour force (Figure 4-2). Because virtually all the increase in participation rates will come from women, as the rate of growth of the labour force generated from source population growth and net immigration is reduced, the share of women in the labour force will continue to grow at a rapid rate. In 1980 the female share of the labour force was about 40 per cent. Over the next decade we project this share to rise to over 44 per cent.

Contributing significantly to labour force growth in the 1980s, particularly in the western provinces, will be strong growth in the Native population of working age, which is expected to increase at an annual rate of 2.9 per cent compared to 1.1 per cent for the total population. The potential for labour force growth among Native people is significantly higher because their labour force participation rate is substantially lower than that of the population as a whole. Thus if severe labour market imbalances are to be avoided, women and Native people will have to be increasingly employed in a broader range of occupations and industries.

In contrast, the share of the labour force comprised of young people (15-24 years) will decline substantially over the decade. The peak in the youth share of the labour force was 27.1 per cent in 1975. By the end of this decade we expect it to fall to 20.6 per cent, below its 1960 low point of 21.5 per cent. This implies, of course, that a smaller and smaller share of labour force participants will be made up of new entrants. Since the youth group is most mobile with respect to both location and

Table 4-10

Sources of Labour Force Growth (average annual per cent rates of growth)

	1956-66	1966-73	1973-79	1980-85 ¹	1986-90 ¹
Source population	2.2	2.6	2.2	1.3	1.0
—Net immigration	0.5	0.4	0.4	0.2 ²	0.2 ²
—Domestic	1.7	2.2	1.9	1.1	0.8
Participation rate	0.4	0.7	1.0	0.7	0.8
Total labour force	2.6	3.3	3.3	2.0	1.8

¹There is no significant difference between Alternatives A and B.

²Assuming net immigration of 50,000 annually.

Source: Historical data based on Statistics Canada, *Labour Force Survey*. Projections developed by the Task Force.

occupation, this change suggests a reduced ability of the labour supply to adjust to new demands, a fact with important implications for labour market policy.

The projected steady decline in the youth share of the labour force also has important implications for the future unemployment rate of young people relative to that of adult men. The analysis of Chapter One concluded that the rising relative unemployment rate of young people in the 1960s and 1970s was related to limits of the ability of the economy to absorb the extraordinarily large numbers of young people entering the labour market. This absorption problem will gradually diminish

over the decade of the 1980s and it is likely that the youth unemployment rate will decline to some extent relative to that of adult men.

It is most unlikely, however, that the youth rate will approach equality with the rate for more experienced workers. In the 1950s, before the entry of the baby boom generation to the labour market, the youth unemployment rate was one and one-half times the rate for adult men. To some extent, higher youth unemployment simply reflects the high job turnover of new entrants to the labour market who seek information through job experience before settling down.

The role of public policy in facilitating adaptation of young people to the labour market is essentially to improve their access to information about careers and job opportunities.

A small subset of young people, primarily those who do not complete high school, experience particular labour market difficulties which continue to warrant special attention. Indeed, the plight of these individuals may well worsen in years to come as the average education level of their peers increases and they become increasingly disadvantaged in the job market.

Principal Conclusions of Aggregate Supply and Demand Analysis

As always, the future is clouded with uncertainty so that many of the developments outlined above must be regarded as no more than tentative estimates of how the economy in general and labour markets in particular might evolve over the decade. Uncertainty is particularly great on the demand side, where the course of events will be powerfully conditioned by international developments.

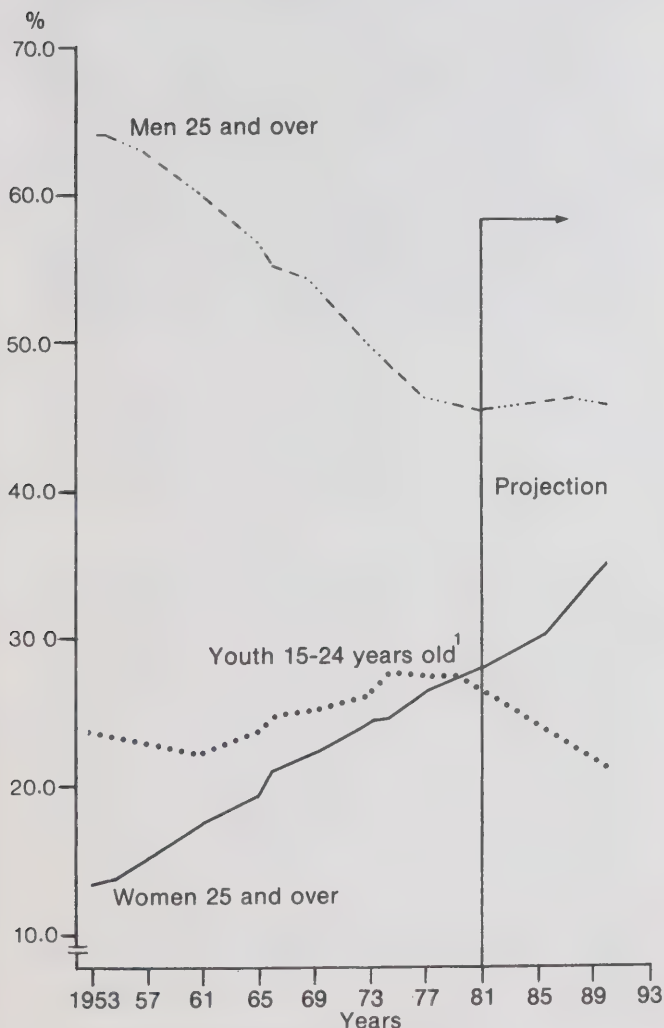
We have some confidence in our projection of converging rates of growth in employment in the goods-producing and services-producing sectors of the economy because this development is conditioned to a considerable extent by demographic developments.

On the labour supply side, while there are important areas of uncertainty, particularly with respect to the future course of labour force participation behavior, some key characteristics are known with virtual certainty.

- Labour force growth will be slower.
- The labour force will be comprised to a greater extent of women and, particularly in the West, of Native people, while the proportion of young people will decline.

Figure 4-2

Labour Force Composition by Demographic Groups, 1953 to 1990



¹ Youth 14-24 years old prior to 1966.

Sources: Historical data based on Statistics Canada, *Labour Force Survey*. Projections developed by LMDTF.

Taken together these facts have strong implications for the operation of labour markets and for the requirements of labour market policy in the 1980s.

- Adaptation of the labour force to a changing industrial, occupational and geographic structure of demand will have to be made increasingly by workers already in the labour force, who are inherently less mobile than young new entrants.
- Women, who have traditionally been concentrated in a relatively narrow range of occupations and industries, and Native people, who have experienced both extraordinarily high rates of unemployment and narrow occupational range, will need to be employed in a broader and more diverse set of occupations in the future.
- It is likely that the unemployment rate of young people will gradually decline relative to the rate for adult men.

The following sections assess in some detail the implications of our projections for labour market adjustment.

- We first assess the size of the changes which appear to be required in the distribution of male and female employment across industries if labour market imbalances caused by excessive concentration of women's employment are to be avoided.
- Next, we assess the extent to which shifts in the geographic distribution of output and employment seem likely to occur, to determine whether growth is likely to be constrained by mismatches between the geographical composition of demand for labour and the available supplies.
- Finally, we assess the prospects for imbalances among selected groups of occupations — an assessment which requires that information on demand be brought together with available data on supply sources.

Employment Opportunities for Men and Women

We noted in Chapter Two that during the 1960s and early 1970s the unemployment rate for women tended to rise relative to that for men, that this was associated with a rising female share of the labour force but that notwithstanding the tendency for women's unemployment rates to rise, there was a dramatic and continuing increase in employment of women, associated primarily with increasing employment in clerical, sales and service jobs in the service industries. We also noted the continued high growth in employment of women in the late

1970s, notwithstanding a relative slowdown in the growth of service sector employment, and that in recent years the unemployment rate of women has stabilized relative to that of men. Employment growth remained high in the face of slowing service sector growth because of a tendency for women to be employed in a more diverse number of occupations and industries.

Our projections suggest that the contribution of service sector employment to total employment growth will continue to fall during the 1980s, while the female share of the labour force is likely to continue to rise. There is concern, therefore, that the continued high concentration of women in service sector occupations, combined with high labour force growth, will result in a growing problem of unemployment among women, while simultaneously labour markets in occupations and industries which primarily employ men will become increasingly tight.

Since our projections do not provide detail on employment and unemployment by sex, we cannot address this issue directly. Our projections, combined with data on the recent employment experience of men and women, do however enable us to pose and to answer a hypothetical question. Using our projections of employment growth by industry and of labour force growth among men and women, what would unemployment rates for men and women be in 1985 and 1990 on the alternative assumptions that:

- the employment shares of men and women in different industries remain at their 1979 levels; or
- the employment shares of men and women in different industries continue to change over the 1980s at the same rate as in the period 1973-79?

The question is whether maintenance of existing employment shares or, alternatively, the recent rate of change in those shares is likely to be sufficient to absorb the expected labour force growth among women or whether more rapid change seems likely to be required. We must stress that we have no way of knowing whether recent trends in the distribution of men and women across industries are likely to continue. This requires much more detailed investigation. However, there is some evidence that labour markets have been adapting to the changing composition of the work force. We simply wish to assess whether appreciably more rapid adjustment appears to be required in conditions which may prevail in the 1980s.

The relevant "index of adequacy" of adjustment is the ratio of the unemployment rate among women to that of men. The ratio of unemployment rates (not absolute levels of rates) is the relevant index, because joblessness

among both sexes will depend upon general economic conditions. Using the ratio eliminates the influence of this factor and isolates the industry mix effect.

A rising ratio over the 1980s would suggest inadequate adjustment. It would indicate a tendency for labour markets in industries in which men are dominant to become increasingly tight, while at the same time increasing slackness would occur in labour markets in industries in which women were predominantly employed.

The results of our analysis are shown in Table 4-11. They suggest that if the 1979 industrial distribution of employment among men and women were maintained through the current decade (line 1), labour markets in male-dominated industries would tend to become very tight indeed, while the women's unemployment rate would tend to rise dramatically. Indeed, on the basis of this extrapolation the imbalances would be so severe that the arithmetic shows a negative male unemployment rate by 1990, an event which clearly cannot occur.

If, on the other hand, the industrial distribution of employment among women were to continue to change at the same rate as in recent years (line 2), the tendency for women's unemployment to rise relative to that of men would be reduced substantially and, in fact, would only tend to occur in the late 1980s. For purposes of comparison, line 3 of Table 4-11 shows the unemploy-

ment rates for men and women which would be required, given our projection of the aggregate unemployment rate, to maintain the same relationship between male and female unemployment rates as existed in 1979. The 1979 ratio is used simply as a basis for comparison. We are not suggesting that it represents an appropriate relationship between unemployment rates for men and women.

Our analysis suggests, therefore, the need over the decade for increasing integration of women into industries in which they have not traditionally been employed in large numbers, in order to avoid increasing tightness in labour markets for men and increasing slack in labour markets for women. A higher rate of integration would be required throughout the decade if unemployment rates of men and women were to be equalized. There are, of course, mechanisms of adjustment in labour markets which can be expected to increase the speed of adjustment as such imbalances begin to make their presence felt. For example, increasing tightness in labour markets for men relative to those for women can be expected to result in a tendency of wages for work done by men to increase relative to those for work done by women. This process would, in turn, induce employers increasingly to hire women into these occupations and industries.

The market process would, however, result in increasing wage pressure in the economy and could result in

Table 4-11
Hypothetical Unemployment Rates for Men and Women (per cent)

	1985			1990	
	A	B	C	A	B
(1) Assuming 1979 industrial distribution of employment					
Men	2.1	3.9	3.6	-3.7	-0.9
Women	12.8	13.7	13.5	15.8	17.5
Ratio of women's to men's unemployment rates	6.1	3.5	3.8	—	—
(2) Assuming continued change in the industrial distribution of employment at the rate experienced in 1973-79.					
Men	5.8	7.4	7.2	3.5	6.1
Women	7.7	8.7	8.4	6.6	8.5
Ratio	1.3	1.2	1.2	1.9	1.4
(3) Assuming continuation of the 1979 relationship between women's and men's unemployment rates					
Men	5.8	7.0	6.8	4.3	6.3
Women	7.7	9.3	9.0	5.6	8.3
Ratio	1.3	1.3	1.3	1.3	1.3

Source: Estimates by Task Force.

significant production bottlenecks as the adjustment process takes place. Such bottlenecks and wage pressures, and the associated costs to the economy in terms of higher inflation and forgone production, can be reduced to the extent that public policy can facilitate the introduction of women into a more diverse set of occupations and industries before imbalances occur, an issue to which we return in Chapter Six.

The Regional Pattern of Employment Growth

Employment and economic conditions have varied substantially across regions and provinces in the past and prospects of future growth, in particular the strong expected growth in the energy sector, suggest that the pattern will continue to vary and to change appreciably across provinces.

Chapter Two has examined the historical patterns of employment, labour force and unemployment changes in the various provinces and discussed the role of each of these, including the role of internal migration, in the adjustment process. It was noted that while movements in the unemployment rate reflected movements in the demand for labour in some provinces, notably in the West, there were important instances, particularly in the Atlantic region, where this was not the case.

In the Atlantic provinces movements in the unemployment rate were dominated by labour supply developments primarily related to participation rate behavior but also, in important degree, to changes in the pattern of internal migration. It is evident that labour market adjustment processes are extremely complex, that they appear to differ in different parts of the country and are difficult to predict.

Given the diversity of labour market conditions across the country and the general expectation that the geographical pattern of industrial activity will continue to shift in the future, it is critical in assessing the extent of adjustment that seems likely to be required in labour markets that we attempt to assess the nature of prospective developments in different regions. Since our macro-economic projections do not contain a disaggregation of economic activity and employment by regions, we had to find some way of incorporating judgmental regional projections in order to assess the implications of our scenarios for the nature of regional labour market adjustments which appear to be required in the 1980s.

Just as uncertainty about the national outlook led us to examine a number of scenarios, uncertainty about the regional distribution of economic activity led us to examine the implications for interregional adjustment of

two alternative regional scenarios. One set of projections was prepared by CEIC regional economists. The other assumes stronger employment growth in the West and in the Atlantic region than in the CEIC projection.

In assessing the labour market implications of the regional projections, several alternative means of analysis are conceivable. One possibility is to attempt to assess the extent to which each of the channels of adjustment to interregional imbalances might contribute to alleviating them. Strong excess demand for labour in one region relative to another will induce adjustment through a number of channels:

- reduction in the regional unemployment rate relative to the national average;
- an increase in the regional labour force participation rate in response to increased employment opportunities;
- increased migration to the rapidly growing region from other parts of Canada; and/or
- an increased tendency for immigrants to Canada to settle in the more rapidly growing region.

The lower the response of these labour supply channels to increased demand, the greater will be the tendency for wages to rise in the strong growth region and the greater the extent to which labour market balance will ultimately be achieved by choking off incipient demand. Conversely, conditions of weak demand can be accommodated through changes in these variables in the opposite direction.

Typically, adjustments to changing regional conditions are effected simultaneously through some or all of these channels. In general, each can be expected to contribute but there are limits to the extent to which each can be used.

- There is some irreducible level of unemployment associated with "frictional" joblessness as new entrants to the labour force and job-leavers search for jobs.
- The potential for increase in the participation rate becomes smaller as the level of participation rises, because there will always be some potential participants who prefer to remain outside the labour market.

Given the evident difficulty of assessing the extent to which each of the channels would bear the burden of adjustment, we opted instead to gauge the total amount of interregional labour adjustment implied by our regional employment projections. Although the adjustment will be spread among a number of channels, we constructed our "index of implied interregional labour

adjustment” by assuming that the regional structure of unemployment and participation rates across the country and the pattern of settlement of immigrants from abroad would remain as they were in 1979. Consequently, changes in the pattern of employment, for which we had the projections noted above, are entirely reflected in changes in the pattern of internal migration. Thus the projected pattern of internal migration can be viewed as an index of the extent to which labour market adjustment within and between provinces is implied by our projections. It does not provide a prediction of how much internal migration is likely to occur. Some of the adjustment will take place through other channels, noted above.

The projections of employment growth by province corresponding to Alternatives A and B (which incorporate the CEIC regional distribution) and the alternative regional scenario (Alternative C) are shown in Table 4-12. Substantial differences are evident in the two projections. In particular, the CEIC projection indicates less employment growth in the East and the West and more new job opportunities in the central provinces than does the alternative distribution. Thus the projections represent a range of views as to regional developments underlying national projections for the years to 1985.

The implications of these projections for the amount of interregional adjustment represented by the pattern of internal migration, holding the structure of unemployment and of participation rates constant and assuming that the pattern of settlement of internal migrants is the same as in the recent past, is shown in Table 4-13. Two points should be noted.

- The numbers refer to all migrants, including children and retired people as well as labour force participants.
- The numbers show *net* migration to or from a given province. As noted in Chapter Two, much larger flows of people in and out of each province underlie these net flows.

The pattern of internal migration, which represents the interprovincial labour market adjustment implied by our provincial employment projections, is shown in the bottom half of Table 4-13; historical data are also included for comparative purposes to indicate the extent to which past adjustments have occurred through migration.

The results suggest a number of observations.

- The projected migration pattern is influenced much more by the assumptions made about the regional distribution of employment growth than by those made about the national economic outlook.
- Alternative C implies continued very tight labour markets in Alberta, reflected here in a continued and significant increase in net migration to that province, considerably greater than that implied in the CEIC scenarios. In Alberta the unemployment rate is already very low and the participation rate very high, so that if the projected employment growth is to occur, much of the adjustment will have to take place through increased employment of the rapidly increasing Native population, through an increase in internal migration, or through a changing pattern of settlement of

Table 4-12
Employment Growth by Provinces (average annual per cent rates of growth)

	1973-79	1980-85		
		CEIC Regional Projection		Alternative Regional Projection
		A	B	C
Newfoundland	3.2	1.5	1.1	4.0
Prince Edward Island	3.9	1.4	1.0	2.1
Nova Scotia	2.8	1.9	1.7	2.6
New Brunswick	2.8	2.2	1.9	1.8
Quebec	2.4	1.7	1.5	1.4
Ontario	3.1	2.0	1.6	1.4
Manitoba	2.3	1.5	0.9	2.1
Saskatchewan	3.1	2.3	2.0	2.9
Alberta	5.5	4.4	4.1	5.1
British Columbia	3.9	2.5	2.2	3.1
Total	3.2	2.2	1.9	2.2

Source: Historical data based on Statistics Canada, *Labour Force Survey*. Projections developed by Task Force.

Table 4-13

Interprovincial Net Migration of Children and Adults (annual averages, '000)

	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC
1961-66	-3.0	-0.6	-5.4	-5.1	-4.0	17.1	-4.7	-8.4	-0.4	15.5
1966-71	-3.9	-0.6	-3.3	-3.9	-24.5	30.1	-8.1	-16.3	6.4	23.0
1971-76	-0.4	0.8	2.3	3.4	-15.5	-7.7	-5.4	-8.2	11.7	18.5
1976-77	-1.4	1.0	0.2	2.6	-23.0	-8.0	-4.2	6.8	25.3	2.1
1977-78	-2.6	1.0	0.7	1.9	-46.9	10.1	-7.2	2.0	25.8	15.7
1978-79	-1.9	-0.1	1.4	1.1	-32.1	-8.1	-10.9	1.7	30.4	20.1
1979-80	-1.0	0.4	-1.1	0.6	-31.3	-19.6	-15.9	-0.4	30.9	39.4
1980-85										
CEIC Regional Projection										
Alternative A	-9.5	-0.8	0.1	0.0	-11.3	-18.3	-6.8	3.5	34.9	8.2
Alternative B	-8.0	-0.3	0.7	0.8	-6.1	-24.3	-7.7	3.1	32.3	9.5
Alternative projection	2.4	0.2	4.5	-2.5	-32.0	-58.1	0.8	8.1	50.9	25.8

Note: Historical data refer to census year, i.e., year beginning June 1 of year T and ending May 31 of year T+1

Source: Historical data based on Statistics Canada, *International and Interprovincial Migration in Canada*. Projections developed by Task Force.

migrants from abroad. While continued increases in both international and internal migration to Alberta are likely to be induced by the prospect of high relative wage rates, the income inducement may well be tempered by limits to the province's capacity to absorb migrants, reflected in rapidly rising housing prices and increasing strains on the province's ability to provide social services.

- All projections imply increasing tightness in labour markets in Manitoba and Saskatchewan. Again the strength implied by the alternative scenario is significantly greater than in that of the CEIC.
- In the Atlantic region as a whole, Alternatives A and B imply an increase in excess labour supply, particularly in Newfoundland and Prince Edward Island. The large implied net outflows from Newfoundland in the former case reflect an assumed rate of employment growth in that province which is much lower relative to the national average than has occurred since 1973. The increasing probability that offshore oil discoveries will be developed suggests that labour markets in the Atlantic region may be significantly tighter than implied by projections A and B.
- Our projections suggest a tendency for labour market conditions in Ontario to be slacker in the next few years than they have recently been. This is particularly the case in alternative C. It is unlikely that such increased labour market slackness would be reflected entirely in increased out-migration. It is more likely that the Ontario unemployment rate

would tend to rise, net out-migration would increase and smaller numbers of international migrants would settle in Ontario, should relatively weak employment growth prevail.

Collectively, these observations suggest the following.

- Internal migration has played a substantial role in alleviating interregional labour market imbalances in the past and can be expected to do so in the future.
- In Alberta the unemployment rate is already very low and the participation rate very high, so that migration (internal and international) and increased use of Native people will have to play a much larger role in sustaining strong employment growth there than in other provinces.
- It is likely that those provinces for which relatively weak employment growth is projected would adjust only partially through an increase in out-migration and that some increase in their unemployment rates would occur.
- Increased out-migration from the Atlantic region is unlikely in view of the improving prospects there.

These conclusions, in turn, suggest that labour market policy will need to be increasingly oriented towards easing the interregional adjustment process.

- The instruments of immigration policy might be used to the extent possible to increase the flow of independent immigrants from abroad to the western provinces. This issue is discussed in Chapter Ten.

- Measures might be considered to increase the extent to which temporary interregional mobility is used, particularly to supply workers to temporary construction jobs. This issue is discussed in Chapter Eleven.
- On the demand side, the scheduling of very large construction projects will need to take account of the inherent limits to regional labour supplies.

Occupational Imbalances

Much of the recent interest and concern about current and prospective labour market conditions relates to the possibility of strong excess demand in a number of occupations, particularly those in the higher skilled manufacturing trades and among engineers. Although this concern is usually expressed in terms of broad groups of occupations, reference is frequently made to a relatively small number of critical trades in which a shortage of qualified people, though small in number relative to total employment, can cause severe bottlenecks in the production process.

The macroeconomic analysis conducted in this paper does not permit us to examine in detail conditions in particular occupations. It does, however, enable us to assess, for broad groups of occupations requiring substantial formal training, whether the relationships between available indicators of supply and demand indicate the development of a tighter or looser labour market in the future relative to the recent past. Occupations requiring little or no training are of minimal interest from a labour market policy point of view because, barring problems of geographical mobility, occupational mobility is high and the labour market can adjust quickly.

To assess the dimensions of prospective imbalances in occupations requiring training, the following kinds of data would be required:

- the number of new jobs to be created in the occupation;
- the number of jobs expected to become available as current employees leave the labour force;
- the number of new entrants expected to enter the occupation from the formal training system;
- the number of people expected to enter the occupational labour force from abroad (i.e., gross immigration in the occupation);
- the number of people entering the occupation from informal training processes (such as industrial training in non-regulated trades);

- the number of people expected to leave the occupation through emigration; and
- transfers of workers to the occupation in question from related occupational categories.

In the case of demand for and supply of workers to particular occupations, our information is incomplete for both past and future periods. With respect to the numbers of people employed in particular occupations in recent years, we are forced to estimate the occupational distribution of employment within industries on the basis of information collected in the early 1970s. On the supply side we have very little information on the amount of emigration by occupation and we have none on the extent to which inter-occupational mobility has occurred.

As a consequence, there is likely to be a substantial amount of measurement error in the historical data. Our estimates of prospective future imbalances (i.e., of the order of magnitude of labour market adjustment required in particular groups of occupations) over the period to 1985 are adjusted to take account of our estimates of the measurement errors stemming from inadequate and incomplete data. These estimates, given the measurement difficulties, can only be used as crude indicators of directions of change in labour market conditions. In effect, they assume that the amount of informal industrial training will be similar in the future to that which existed in the past, that the level of emigration will remain constant, and that the degree of occupational mobility between groups of trades will not change over time.

Given all these caveats, the estimated imbalances can be regarded—where demand exceeds supply—as estimates of the immigration requirements to 1985. This is so because for most of the occupations analyzed here, the training period is about four years. Most new entrants to highly skilled occupations from the domestic training and education system are already in training and taken account of in our estimates of supplies of new entrants. Thus, given the length of the training periods for the occupations which we consider, there is no way for domestic supplies to adjust over a time horizon equal in length to the training period to alleviate the imbalances other than through increased occupational mobility.

Given the time and resources available, we have not been able to conduct a thorough analysis of all occupational groups requiring significant amounts of training. We do not claim, therefore, to have conducted a complete analysis of the occupational imbalance issue. This would require compilation and analysis of much more qualitative and quantitative information than we have

done. This analysis, and that of our industry studies, covers a few areas of key concern and illustrates what should be done on a broader and continuing basis.

The analysis, using available macro data, is confined to:

- the highly skilled manufacturing and construction trades for which training takes place largely through the apprenticeship system; and
- the highly qualified occupations (i.e., occupations which generally require a university degree) taken together as a single group.

The results of our estimates for manufacturing and construction trades of our three projections (from Table 4-4) are shown in Table 4-14. All projections imply increased tightness in labour markets for highly skilled manufacturing trades, and to a smaller extent for mechanics and repairmen, during the period to 1985.

For the construction trades Alternative C projects higher growth in construction employment than the scenarios A and B and, as a consequence, also suggests considerably greater tightness in these markets. The

construction labour market is particularly difficult to assess at the aggregate level because it is likely to undergo a significant shift in the mix of activity towards non-residential construction in the 1980s with a consequent shift in the mix of skills required. Considerable difficulty may be experienced in adjusting to the changing mix of labour requirements.

We have confined our analysis to the period through 1985 because our estimates of new entrants are constructed from data showing the number of people already in the training pipeline, which has a maximum length of about four years. Our demand projections suggest, however, that the manufacturing and construction industries are likely to exhibit relatively strong growth through 1990, so that continued increases are likely to be required in the amount of training devoted to these occupations.

It is noteworthy that our analysis suggests a significant tightening in some critical labour markets in a period when economic growth is expected to be moderate and unemployment relatively high. If, as some have suggested, the late 1980s are characterized by even

Table 4-14

Supply and Demand Imbalances in Higher Skill Trades (annual averages, '000)

	Sources of new supplies ¹			Job openings ²	Apparent imbalances	Adjusted imbalances ³
	Domestic	Immigration	Total			
Manufacturing trades						
1975-79	4.9	4.4	9.3	14.5	-5.2	0.0
1980-85	6.1	—	6.1	Alternative A - 19.6	-13.5	-8.3
				B - 17.6	-11.5	-6.3
				C - 18.2	-12.1	-6.9
Construction trades						
1975-79	9.4	2.9	12.3	19.3	-7.0	0.0
1980-85	11.0	—	11.0	Alternative A - 20.8	-9.8	-2.8
				B - 19.2	-8.2	-1.2
				C - 23.3	-12.3	-5.3
Mechanics and repairmen						
1975-79	5.6	2.3	7.9	11.6	-3.7	0.0
1980-85	6.2	—	6.2	Alternative A - 12.9	-6.7	-3.0
				B - 11.7	-5.5	-1.8
				C - 13.4	-7.2	-3.5
Total higher skill trades						
1975-79	19.8	9.6	29.4	45.3	-15.9	0.0
1980-85	23.3	—	23.3	Alternative A - 53.3	-30.0	-14.1
				B - 48.6	-25.3	-9.4
				C - 54.9	-31.6	-15.7

¹New supplies from domestic sources (i.e., apprentices, journeyman certificates) and immigration (including employment visas).

²Includes net increase and replacement demand.

³Assuming that changes in employment were equal to changes in supply over the 1974-79 period.

Source: CEIC, *Supply-Demand Imbalances in Higher-Skill Trades*, June 1980. Estimates made by the Task Force using COFOR model and different macro scenarios.

stronger growth in investment, conditions in the markets for many of the trades would be very tight indeed.

The implication of our analysis for immigration policy is straightforward. Assuming a sustained economic recovery in the United States and Canada beginning in 1982 and barring a substantial increase in inter-occupational mobility — on which, as noted above, we have no evidence — a significant increase in immigration among skilled tradespeople is likely to be required on average over the next three or four years if severe tightness in those labour markets and associated production bottlenecks in manufacturing and construction industries are to be avoided.

With respect to labour market conditions among the whole group of occupations which require university education (Table 4-15), we find that labour markets are likely to be characterized by increased excess supply in the early 1980s as the number of people coming through the university system greatly exceeds the overall demand for highly qualified manpower. This reflects in considerable measure the slowdown in relative employment growth of highly qualified occupations in the health and education groups, as a consequence of slowing population growth.

Within the highly qualified groups as a whole, however, it is probable that particular occupational groups

will be characterized by substantial excess demand. The principal group in which conditions of excess demand are generally expected to persist is engineers. We have reviewed a number of studies assessing prospective conditions in engineering occupations. The consensus is that, in general, the market is expected to remain very tight, particularly later in the decade when the engineering manpower required by energy investment projects in western Canada is expected to increase substantially.

All of the foregoing assessments of occupational imbalances have been conducted at a national level. Given the substantial variability in employment growth projected across regions, however, the extent and direction of imbalances can be expected to vary significantly from one province to another. In general, one would expect the probability of excess demand to be stronger in the West and East than in the central provinces if one accepts the regional scenario represented by Alternative C in Table 4-13. We have not had time to conduct a comprehensive regional analysis of prospective occupational imbalances (indeed regional analysis is complicated by the fact that internal migration is a source of supply available to individual regions where it is not for the country as a whole), but Table 4-16 illustrates the result of such an analysis with respect to highly qualified manpower for the four western provinces taken together, *assuming no internal migration*. We find that in those

Table 4-15

Supply and Demand Estimates of Highly Qualified Manpower (annual averages, '000)

	1972-79	1980-85		
Sources of supply ¹				
Labour force entrants from the education system with university degree ²	55.4	62.9		
Immigrants in managerial professional and technical occupations	20.5	—		
Total	75.9	62.9		
		A	B	C
Job openings ³	77.6	56.7	51.0	59.2
Apparent imbalances	-1.7	+6.2	+11.9	+3.7
Adjusted imbalances ⁴	0.0	+7.9	+13.6	+5.4

¹Number of potential labour force entrants representing the annual supply of new entrants available to the labour force.

²Includes completed Bachelor's, Master's and Ph.D.s.

³Includes net increase and replacement demand.

⁴Assuming that changes in employment were equal to changes in supply in the 1972-79 period.

Source: Zsigmond, et al. *Out of School—Into the Labour Force*. Statistics Canada, 1978, p. 70. Estimates made by Task Force using COFOR model and different macro scenarios.

Table 4-16

Supply and Demand Estimates for Highly Qualified Occupations, Western Canada (annual averages, '000)

	1976-78	1979-85		
Sources of supply ¹				
Labour force entrants from the education systems ²	14.8	14.5		
Immigration in highly qualified occupations	3.0	—		
Total	17.8	14.5		
		A	B	C
Job openings ³	22.9	22.8	21.4	26.4
Apparent imbalances	-5.1	-8.3	-6.9	-11.9
Adjusted imbalances ⁴	0.0	-3.2	-1.8	-6.8

¹Number of potential labour force entrants representing the annual supply of new entrants available to the labour force.

²Includes completed Bachelor's, Master's and Ph.D.s.

³Includes net increase and replacement demand.

⁴Assuming that changes in employment were equal to changes in supply in the 1976-78 period.

Source: CEIC, *Potential Labour Market Imbalances in Key Groups of Occupations in Western Canada*, 1981. Estimates by Task Force using structure of COFOR model and different macro scenarios.

provinces, markets for highly qualified manpower are likely to exhibit increased tightness in the 1980s, contrary to the result obtained for the country as a whole, which indicates, as reported above, an increasing excess supply of university graduates.

This conclusion is, of course, simply another way of looking at the implications of regional developments for internal migration and suggests that to avoid significant strains in regional labour markets, such migration will have to be comprised of substantial numbers of skilled workers.

Our crude and limited analysis of a small number of broadly defined occupational groups suggests that labour market conditions are likely to vary significantly from one occupational group to another in the 1980s. If our projection of a fairly rapid economic recovery beginning in 1982 is validated, labour market conditions in the highly skilled manufacturing and construction trades seem likely to be tighter than they have been in recent years.

Conversely, it seems unlikely that the number of openings in jobs requiring a university degree will be sufficient to absorb all new graduates. Within this broad grouping, however, conditions will vary substantially from one occupation to another. Very strong demand is likely to exist for engineers, for example, while demand for graduates wishing to enter teaching occupations will be very weak.

The existence of an increasing "excess supply" of university graduates does not imply a corresponding increase in unemployment among new entrants. Although some increase in unemployment cannot be ruled out, it is probable that university graduates will continue to get relatively more jobs than less-educated entrants to the labour force. There will, however, likely be a tendency for increasing numbers of graduates to take jobs which do not require a degree. That is, there will tend to be an increasing amount of "underemployment" among some categories of university graduates, a phenomenon which already appears to exist to a large degree among graduates in some disciplines—humanities and social science, for example (Statistics Canada, March 1981).

Given the relatively long training periods required for highly skilled occupations, the major mechanism available for alleviating excess demand in the short run is increased immigration. In the longer run, market processes will generate increased supplies as the perception of abundant job opportunities attracts new labour force entrants to train for these occupations. Conversely, low demand will reduce training and eventually reduce supply for low-demand occupations. Because of the long

training times involved, there is considerable risk that the increased numbers of graduates to occupations currently in excess demand will exceed the number of job openings available at the time of their graduation. Conversely, in occupations where demand is weak the number of new graduates can eventually decline to the point where a state of excess demand results. As a consequence market conditions in highly skilled occupations tend to oscillate between excess supply and excess demand.

Public policy can play an important role in reducing such cycles by improving the state of labour market intelligence and of information for new entrants. Similarly, labour market policies need to be geared to improving the incentives for training institutions to adapt rapidly to changing market conditions. These issues are discussed in Chapters Five and Nine, respectively.

Conclusions

The most fundamental conclusions arising from the analysis of this chapter are also those which we can draw with considerable confidence. They relate to the following prospects.

- The labour force will be growing more slowly in the future than in the past.
- The composition of the labour force will change dramatically as women and, in the West, Native people form an increasingly large proportion of the work force.

The general implications for labour market policies are clear.

- Policies will have to be directed much more than they have been to improving occupational and industrial mobility of workers, to improving mechanisms for retraining and ensuring that, to the extent possible, workers in different occupations possess a set of skills common to a number of occupations and industries.
- Policies will have to be directed more to integrating women and Native people into a broader range of industries and occupations, a process that is partly related to the operation of the training and education systems, partly to the dissemination of information, and partly to revisions of obsolete hiring practices and internal promotion procedures of employers.

The data show that the occupational and industrial structure of employment among men and women is adjusting and that continued change at the pace at which it has recently been occurring would avoid more

severe imbalances until the mid-1980s. Beyond 1985, however, our projections suggest increasing imbalances unless more rapid adjustment occurs. More detailed analysis would be required to determine whether continued adjustment is likely to occur in the absence of measures to improve access of women to the full range of occupations. It is by no means clear that public policies and private practices are doing all they can to facilitate the process, a point which is developed in Chapter Six.

On the occupational dimension our analysis indicates that, even with economic growth occurring at a moderate pace, significant excess demands are likely in the manufacturing and construction trades, and among some highly qualified occupations, particularly in engineering. This suggests that fundamental improvements

are required in training processes so that shortages can be alleviated by domestic means in the medium and longer run. In the short run, over the next three years, some increase in immigration of workers with skills in excess demand will be required.

Continuing shifts in the regional structure of economic activity are likely to require, as they have in the past, substantial flows of workers from slower growing to faster growing provinces. Improved mechanisms seem likely to be required to facilitate the inter-regional adjustment process.

Succeeding chapters deal with many of these issues and suggest ways in which existing policies might be reoriented to facilitate adaptation of the work force to the changing needs of the economy.

The macroeconomic projections on which much of the analysis of this chapter is based were prepared for the Task Force by Informetrica Ltd.

Part Two

Policy Directions for the 1980s

Chapter Five

Providing Labour Market Information and Employment Services

In addition to establishing and maintaining the basic legal framework of the labour market, government acts in two basic ways to facilitate the efficient operation of that market. It intervenes to ensure that employers, workers, and prospective workers have sufficient information on which to base employment and training decisions. It also intervenes in the market adjustment process through the provision of direct adjustment assistance to employers to maintain and create employment and to workers to facilitate retraining and relocation.

The network of Canada Employment Centres (CECs) is the focal point for providing placement and employment services and delivering the broad array of labour market programs administered by the CEIC. The CECs receive job orders from employers, maintain a registry of job-ready workers seeking employment, and attempt to match workers with available jobs. They also engage in employment counselling of individuals and refer people to remedial programs such as training, job creation and mobility. This chapter focuses on the role of the government, through the CECs, in providing placement services, employment counselling, labour market information and intelligence, and makes a number of suggestions as to how these services can be more effectively provided. It does not consider in detail the broader question of how these functions should be combined with the program delivery function so that the range of services provided by CECs can be most effectively delivered. Indeed, given the diversity of labour market conditions across the country, there is probably no single answer to this question. It is more likely that priorities and the appropriate mix of activities will vary from one area to another. How this appropriate mix of activities should be determined and implemented is an issue which is beyond our terms of reference. It is critical, however, that it be part of the process of policy implementation.

This chapter begins with a short analysis of the historic role of the federal government in providing information services to promote the efficient functioning of the labour market. The next section examines the

process of search, followed by an assessment of the role of the Canada Employment Centres in providing placement and labour market information services in light of the needs of the 1980s. The final two sections examine the role of counselling and the role of labour market intelligence.

Historic Role of the Employment Service

1918-1965

Canadian governments have been active in the provision of employment information and services for over 60 years. Under the authority of the *Employment Offices Coordination Act* of 1918, a federal-provincial employment service provided labour exchange facilities across the country. This service, later designated the Employment Service of Canada, constituted a chain of employment offices stretching across Canada, administered by the provincial governments but coordinated by the federal government. The Act provided for federal subsidies amounting to \$150,000 annually to those provinces operating employment offices, distributed equitably with the maximum allowance for any province being not more than half of its total expenditures. The provincial employment offices had to endeavour to place men and women in all trades and occupations, with no charge to either employers or employees.

Federal payments to the provinces were contingent upon certain requirements for purposes of uniformity and coordination. Throughout the 1930s, uniform agreements were concluded with all provinces except Prince Edward Island. In addition to paying subsidies and encouraging the establishment of provincial employment offices, the federal government through the Department of Labour maintained clearance facilities, established a system of inspection, collected and published information on employment conditions, inaugurated a uniform statistical reporting system, supplied all forms and promoted uniformity of operation.

The federal role was expanded substantially by the *Unemployment Insurance Act* of 1940, which estab-

lished the Unemployment Insurance Commission to organize and maintain an employment service for Canada. During 1941, the UIC took over complete control of public placement activities of the provincial services. It continued to operate the employment service until 1964.

The policy adopted in 1941 stated that the employment service would:

- endeavour to refer to suitable employment any employable resident of Canada, male or female, of whatever occupation or calling, and to secure suitable applicants to fill any vacancy notified by an employer, referring the most competent applicant without discrimination on the basis of race, religion or political affiliation, whether or not the applicant was previously engaged in insurable employment;
- in a general way assist wherever and however possible in alleviating or suggesting means for alleviating an unemployment situation;
- charge no fees for service;
- attempt to induce unemployed persons to move from their present place of residence to points where their services were necessary, taking care to avoid encouragement of the movement of workers into any district where unemployed persons were already seeking employment of the type involved;
- without restricting the generality of the service to be provided to employees of whatever occupation, and without prejudice to the employment rights of other persons, give special attention to the placement of veterans, young persons, competent applicants who suffer from physical handicaps, professionally and technically trained applicants, young persons wishing to undertake apprenticeship or training courses, middle-aged workers desirous of entering on training courses, and other similar special categories of applicants.

A National Employment Committee, comprised of leaders of industry and labour was appointed for the purpose of advising and assisting the Commission in carrying out the purposes of the employment service.

Primary emphasis was placed on the provision of information about jobs and available labour to workers and employers, and on the matching of workers to jobs. During World War II, the service played a key role in the allocation of workers to priority employment and in the administration of the Selective Service regulations. During the peak year 1943-44, the service placed over 1.8 million workers in regular employment. After war-time labour regulations ended, placement activity fell dramatically to about 600,000 workers per year in the

late 1940s. During the next 15 years, the service placed between 700,000 and one million workers per year in regular employment, with peak activity occurring during the periods of strong economic expansion from 1955 to 1957 and from 1961 to 1964.

From 1945 to 1960 the service played a much more active information and placement role than it does today. For example, in 1960 — a cyclical trough during which the unemployment rate was 7.1 per cent — the service listed approximately 1.1 million vacancies and placed 0.7 million workers in regular employment. From 1960 to 1980 the labour force almost doubled. Yet during 1980 — also a cyclical trough with a similar unemployment rate of 7.3 per cent — the service listed about the same number of vacancies and placed about the same number of workers in regular employment. Emphasis had clearly shifted away from the information and placement role. Figures 5-1 and 5-2 summarize placement activity.

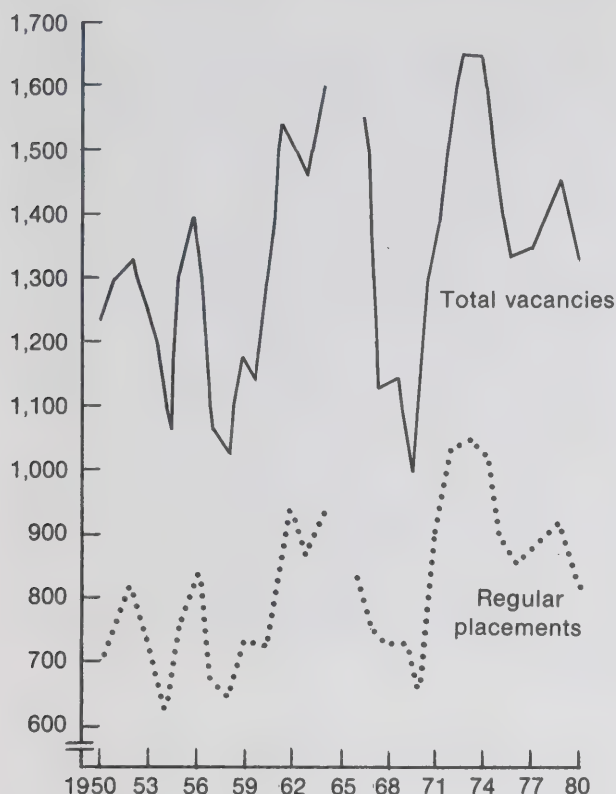
Prior to 1965 the service was very active in facilitating interprovincial exchange of workers. In the late 1940s the service placed over 20,000 workers per year outside their province of residence, despite the primitive classification and registration system then in use. In addition, the service had overseas offices to facilitate the international movement of workers. The service was also very active in professional placement, placing over 5,000 professionals per year during the 1950s.

In 1946 the Analysis and Development Division was created to develop better employment work aids and to provide improved information and analysis about labour market conditions. This current information activity increased markedly during the 1950s as the Commission became more involved in supplying good local and national employment market information to workers, employers and other agencies of government.

Despite the emphasis on information and regular placement activities, from 1943 on the service was very active in assisting disadvantaged workers to find jobs. From its inception, the special placements division placed great stress on assisting the physically disabled, and throughout the late 1940s and 1950s it placed about 15,000 disabled workers in jobs each year. Considerable emphasis was also given to the placement of women. In the mid-1950s, when women constituted only 20 per cent of the labour force, 35 per cent of all placements were women. (In contrast, in 1980 women made up 40 per cent of the labour force and 40 per cent of placements.) While the Women's Division continued to play an active role in assisting women with employment problems after 1946, the main emphasis was placed on the recruitment and placement function.

Figure 5-1

Vacancies and Placements of the Employment Services, 1950-1980 (in thousands)



Note: Data for 1965 not available.

Years are expressed in terms of fiscal years, i.e., 1950 is fiscal year 1950-51.

Vacancies from 1966 to 1973 are estimated figures.

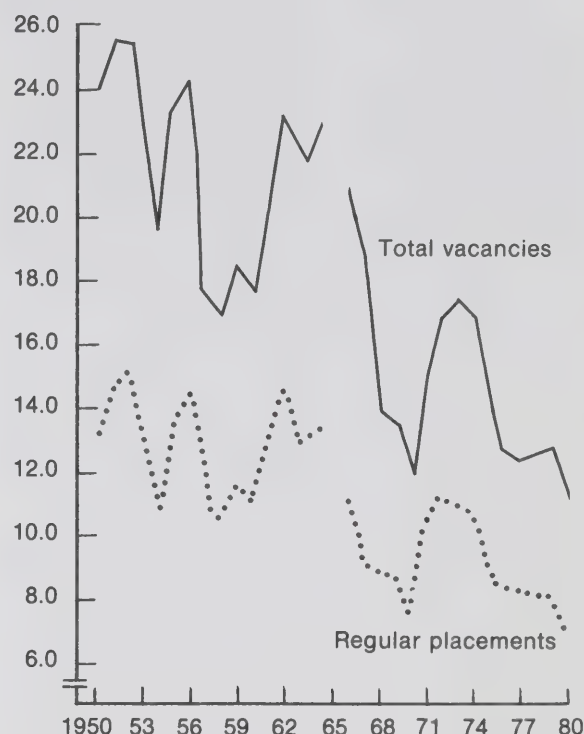
1980 is an estimated figure.

Source: Annual reports of CEIC from 1967 to 1980 and of the Unemployment Insurance Commission prior to 1967.

Training and counselling activities played a relatively minor role in the work of the employment service before 1960. During the 1950s, less than 2,000 workers per year were referred to training (compared to over 300,000 in 1980) and counselling activity was largely confined to the promotion of career planning for youth. With the signing of agreements with the provinces under the authority of the *Technical and Vocational Training Act* of 1960, the role of the employment service in referring people to training began to increase dramatically. The number referred to training grew from 8,000 in 1960 to 43,000 in 1964. In that year, following the recommendations of the Gill Committee, the Minister of

Figure 5-2

Vacancies and Placements of the Employment Services as a Per Cent of Labour Force, 1950-1980



Note: Data for 1965 not available.

Years are expressed in terms of fiscal years, i.e., 1950 is fiscal year 1950-51.

Vacancies from 1966 to 1973 are estimated figures.

For period 1950 to 1965 the old *Labour Force Survey* is used; after 1965 the revised *Labour Force Survey* is used. 1980 is an estimated figure.

Source: Annual reports of CEIC from 1967 to 1980 and of the Unemployment Insurance Commission prior to 1967.

Labour announced the intention of the government to transfer the employment service to the Department of Labour. On April 1, 1965 the National Employment Service was officially transferred to the Department of Labour and began to operate independently of the UIC.

In sum, during this first period of integration of the UIC and the employment service from 1941 to 1964, the prime emphasis of the employment service was on information, referral and placement. The service was able to match jobs to workers and workers to jobs with a reasonable degree of efficiency and played a major role in facilitating interindustry and interprovincial adjust-

ment by providing workers and employers with information on employment developments and reasonably effective "listing and brokerage" facilities. Considerable success was also achieved in the placement of the disabled.

1966–1980

With the formation of the Department of Manpower and Immigration in 1966, the emphasis shifted from information and placement to training, counselling and job creation. In 1966 almost 300,000 adults were referred to training sponsored under the *Technical and Vocational Training Act*. The number trained under the Canada Manpower Training Program, the successor to the TVTA, reached 350,000 by 1970 and remained at about this level throughout most of the 1970s.

This shift in emphasis resulted in a decline in the importance of the employment service as a "labour exchange." While the number of registrants seeking jobs rose from about 2.5 million in the mid-1960s to 4.5 million by 1980, the volume of placement activity declined markedly relative to the size of the labour force. For example, at the peaks of the business cycles in 1956 and 1974, the employment service placed just over one million persons in jobs. In 1956 this represented about one-sixth of the labour force, while in 1974 it represented only slightly more than one-tenth.

This disappointing trend in placement performance mirrors a similar trend in the number of vacancies listed with the service by employers. In each of the cyclical peak years of 1956, 1966 and 1974, about 1.5 million vacancies were listed. In the cyclical trough years of 1960, 1970 and 1980, vacancies listed were 1.1, 0.9 and 1.1 million, respectively. As employment almost doubled over these two decades, the penetration of the service would appear to be only about half as great today as it was two decades ago.

Unfortunately, no consistent data are available on trends in the "quality" of placement and information services rendered by the employment service. Thus it is difficult to determine the causes for the decline in the relative volume of placement activity. One possible reason could be increased concentration on the hardest-to-employ, but the limited available data do not support this. Indeed, throughout the 1970s a declining share of the counsellors' time appears to have been given over to regular referral and placement activities. Resources devoted to placement of the physically disabled actually appear to be smaller today than they were 30 years ago. Special assistance to women in finding employment has increased in the past five years but does not appear to be qualitatively different from that given by the Women's

Division in the 1940s and early 1950s. In sum, the Task Force could find no evidence that the decline in relative importance of the placement activity has been due to increased emphasis on assistance to the hardest-to-employ.

There is some evidence to suggest that part of the reason for the decline in placement activity since the mid-1960s has been the increased attention to other programs administered by the Canada Employment Centres. The sharp increase in training activities in the 1960s undoubtedly required counsellors to devote more time to enrolling clients in training programs, leaving them less time for placement and labour market information activities. The explosion of new programs in the 1970s without commensurate increases in CEIC staff has meant that more counsellors have had to devote themselves to program coordination and administration. Moreover, during the last two years an increasing number of employment service staff have had to be reallocated to the processing of UI claims. In addition, more staff time has had to be devoted to the mechanical process of registering the rising number of workers using the employment service. These three factors have considerably reduced the amount of staff time effectively devoted to the provision of information and placement services.

In sum, during the last 15 years the importance of the employment service as a labour market broker and source of current labour market information has declined sharply. It has never played a really significant role as a source of labour market intelligence and does not do so today. In the rest of the chapter we examine the role that the service could play and examine the feasibility of reorienting the service to play such a role.

The Public Employment Service: Information and Placement Services

The government provides extensive information free of charge to workers and employers to reduce the length of search time and improve the quality of matches between jobs and workers. This improved functioning of the labour market is desirable to increase employment and incomes of workers, to reduce unemployment insurance expenditures, and to minimize the amount of output forgone due to employers' inability to find labour. As the benefits of reduced UI payments and increased output accrue to Canadians generally, it is appropriate that to a large extent the cost of this service be borne by the public at large. To warrant the current level of expenditure, the service must actually reduce search time and improve matches, and do so in a cost-effective manner.

How well and how efficiently is the service achieving its objectives? An internal evaluation by CEIC and an opinion survey by Goldfarb Consultants (1980) provide some information to help answer this question. In interpreting the results of the Goldfarb survey, it needs to be borne in mind that public reactions to, and satisfaction with, CECs are conditioned by their expectations of the results. An unemployed worker in a high unemployment area who does not succeed in obtaining work through his local CEC may express dissatisfaction with the service even though his lack of success may relate more to local labour market conditions than to an inadequate employment service. Similarly, an employer who fails to obtain workers in a tight labour market may express his frustration in terms of dissatisfaction with the CEC. Nonetheless, the survey results provide a useful overview of public attitudes toward the service and are generally consistent with the pattern shown by the evaluation.

It is important to reiterate that the role of CECs varies across the country depending on local labour market conditions and problems. The composite picture presented here does not and cannot do justice to the variety of conditions and roles, but it does point to some common problems which need to be rectified.

Current Performance

Despite relatively high usage of the employment service, Goldfarb reported that over 50 per cent of users found that the service did a poor or "only fair" job in helping people find work. This finding mirrors closely the CEIC administrative data which indicated that over 60 per cent of registrants at the Canada Employment Centres (CECs) received no job referrals. About 38 per cent of registrants said the CEC would be one of the first places they would go if they were looking for work. Unemployed people were somewhat more likely to say this than those employed full time. About 59 per cent said the CEC would not be one of their top priorities, reflecting the negative image people have of the CEC. However, this does not mean they would not use the CEC at all. On the contrary, 56 per cent say that they would consider using the CEC if they were employed and thinking of changing jobs. People in Atlantic Canada in particular say they would use the CEC under those circumstances. Nonetheless the high proportion overall (42 per cent) who would not consider using the CEC to help find a new job indicates the poor impression workers have of the usefulness of CECs. Of these workers, 39 per cent said they would rather look alone because the CEC is ineffective in finding jobs, 10 per cent said they get better results through the newspaper or a private agency, and some objected to the pay rates and types of jobs offered.

Of those who actually used a CEC in the last year, 52 per cent reported that they were not satisfied. They stated that the CEC did not find them a job (36 per cent), that the staff was not helpful in terms of advice (16 per cent), was uninformed (6 per cent) and disinterested (10 per cent), and that they received generally poor counselling service (10 per cent). The greatest dissatisfaction clearly was in the area of counselling expertise and attentiveness.

Despite the rather poor image of the service indicated by Goldfarb's survey, the departmental evaluation indicates that a job searcher who was actually placed by the CEC saved three to four weeks of job search. As approximately 18 per cent of those registered at the CEC were actually placed, workers registering at the CEC have their search time reduced by an average of about three days. Whether a person obtained a job through the CEC or by other methods had no impact on his subsequent tenure in that job or his wages. The departmental evaluation concludes that reduced search time and consequent reduction in frictional unemployment were the primary benefits of the CEC placement service.

Although employers generally prefer to use informal hiring channels rather than the public employment service even for low-skilled workers, half the employers in Canada made use of CECs in 1977. Most did so in order to fill immediate vacancies and one in ten indicated that they used the service "only as a last resort." Of the users, 60 per cent reported that their experience with the service was favourable and well-screened and that CEC personnel were helpful and effective. Thus, those who actually used the service found it relatively helpful.

Overall, Goldfarb found that employers gave the CEC relatively good ratings for the way CEC personnel treated them and for speed and attentiveness in responding to their needs. Those employers who were not happy with the service, however, have some doubt as to how well prepared the CEC personnel are to cope with their jobs. The CEC receives the poorest ratings for screening job applicants and for the quality of workers it sends to the employers. That is, employers are saying the CEC people handle their paperwork well, but it ends there. The follow-through results in considerable frustration.

These opinions of employers coincide with the findings of the CEIC internal evaluation which reported the following.

- About 86 per cent of employer job orders receive one or more referrals.
- The CEC reacts rapidly in making referrals against vacancies notified. Almost half the vacancies receiving at least one referral do so on the same day they are received by CECs, and 70 per cent within the first two days.

- Four out of five vacancies are filled and the remaining one-fifth cancelled, primarily because they have been filled by other means.
- When vacancies are filled, they are filled quickly. The average speed is five days, and four of ten vacancies are filled on the day they are received. The lower the skill requirement, the greater the speed.

Much employer and worker dissatisfaction seems to stem from a misunderstanding about what the employment service can do. The service can provide general information about a wide range of jobs and workers in major labour markets on a national basis, but only limited information about each job and each worker. Expressed differently, the service can provide *extensive* information about the labour market but is severely limited in its ability to provide *intensive* information.

In spite of the somewhat negative public view of the employment service and statistics which point to its usefulness at present to only a limited group of people, there can be little doubt that the public employment service could play a more vital and useful role in the search process than it does today. It has the potential to provide:

- more timely information to workers on jobs available within their local labour market;
- more information accessible to all searchers, including the one-quarter of searchers who are currently employed;
- better information on jobs available outside the local labour market area;
- information to both workers and employers on the current general state of the labour market; and
- a high quality light screening of job seekers to ensure that suitable candidates are sent to fill employer requests.

At the same time, the service will have to continue to be the focal point for the delivery of labour market programs, to provide information for the monitoring of unemployment insurance claimants, for the establishment of training programs, and for the establishment of criteria for admission of immigrants.

The multitude of functions performed by the CECs with relatively limited resources makes it critical that clear priorities be set and operations be streamlined as much as possible to improve the impact and effectiveness of their services.

The Task Force has examined the operation of the service and concluded that certain changes in the method of operation would enable it to play this vital role in a much more effective manner.

Services for the 1980s

At the present time, approximately 70 per cent of staff time for the 7,000 employees of the employment service is devoted to activities related to placement and information services. Of these 5,000 person-years, about one-third are consumed in the process of registering workers and maintaining the worker registration file. Another third is spent in other mechanical activities such as maintaining job boards at job information centres, taking telephone orders for vacancies, searching files, and general administration. The final third is devoted to direct contact with employers and job seekers, most time being consumed in conducting over two million employment assistance interviews with workers.

Very little time is allocated to the provision of current general labour market information to workers and employers, to soliciting job orders from employers, or to high quality light screening interviews with job seekers. In order to free staff time for these activities, the amount of time devoted to mechanical operations must be reduced and the usefulness and accessibility of the information collected must be increased. The Task Force has identified two significant changes necessary to accomplish this goal: rapid extension of the computer-based job order system known as the Metropolitan Order Processing System (MOPS) to all urban areas; and reduction of client and staff time for the registration process.

The MOPS system, which has already been developed and tested in Hamilton and Vancouver and has now been extended to Toronto, Montreal and Ottawa-Hull, provides an efficient means of listing job orders from employers and making them accessible to all CEC offices in a metropolitan region. It reduces considerably the time required to maintain job order files, and, more importantly, ensures that an order placed in one CEC office is immediately available in all offices in a metro region. But to simply extend it to other CEC offices for use of Commission staff would be to miss one of the major potential advantages of the system. With a small amount of further development, employers and job seekers could begin to access the system directly. If terminals were placed in the offices of major employers, they could enter job orders directly, saving some staff time at the CECs and increasing potential usage. TV monitors could also replace job boards in the CEC, which are costly and time consuming to maintain. Job information centres with TV monitors could be established in "store-front" locations remote from the main CECs, to expand access to the system and increase usage by those who are currently employed but wish to begin the process of job search prior to layoff. Extension of service could be

further facilitated by providing direct access to the system in the evening and on weekends. The potential use of the Telidon System should also be explored.

Experience in Vancouver suggests that with proper marketing and promotion this system would make the public employment service more attractive to employers and increase its penetration. With a greater fraction of total vacancies being processed by the service, CEIC would be able to obtain a better picture of existing demand conditions. This data base could provide a basis for more effective monitoring for both immigration and unemployment insurance purposes, as well as more comprehensive reports on labour market conditions.

Extension of the MOPS system to all main cities in Canada would allow unemployed workers in one labour market to learn of job opportunities elsewhere. At present, a National Job Bank is maintained at CEIC headquarters in Ottawa for this purpose. This job bank normally contains about 5,000 job listings which local CECs have been unable to fill from within the local labour market. These job listings in the National Job Bank can be accessed by all CECs across the country for workers willing to move to take a job. While very useful, this system is somewhat cumbersome to operate. The direct inter-city linkage of CECs through an extension of the MOPS system would speed and greatly expand this facility so that workers in all metropolitan areas would be aware of opportunities across the country.

Both client and staff time required to handle registration forms for workers must be reduced. As less than 40 per cent of registration files are ever used for employment purposes, the devotion of up to 2,000 person-years to the registration process and maintenance of the registration file does not appear to be a very effective use of staff time. Only about 38 per cent of registrants ever receive a referral and of these almost half are referred when they register at the CEC. Most of the remaining registrants who receive referrals are clients who have returned to the CEC to check on available jobs, not people called by CEC staff because their registration has been matched through a file search. The pool of job searchers is generally much larger than the number of suitable vacancies, so that very few file searches are actually required in order to make referrals to employers placing job orders.

It is clear therefore that a much more discriminating use of the registration process is necessary and that its use should be confined to two sets of circumstances.

- A file of job seekers should be maintained only in occupations and local labour markets characterized by some degree of excess demand for labour.

- A file of target group members seeking work, should be maintained in order to effectively implement affirmative action policies, as discussed in Chapter Six.

Even in these markets, maintenance of a file of job seekers is only useful if the information contained on that file is accurate and sufficiently detailed to be useful in making job matches. Information on file must relate as closely as possible to the skills actually required to perform jobs. The current classification of jobs is often not very useful for job seekers, as it relates to occupations rather than to skills required and job seekers are often not informed of available jobs which they could perform. For example, a person who operates a certain piece of equipment for a construction company and is registered as "equipment operator-construction" might never be selected for a job using the same piece of equipment in a factory because his file does not contain the information that he can operate that equipment. If the file on job seekers is to be useful in filling many jobs which call for specialized skills, information pertaining to those skills must be placed on file, and for this an appropriate method for listing and coding skills is required. No such system is currently available, although CEIC staff are currently working on its development. This work must be pressed forward as rapidly as possible.

In sum, considerable staff time can be saved through the extension of the MOPS computer-based job order system to all CECs, through limiting registration of job seekers to those whose skills are in high demand or who live in areas with excess demand for labour and to members of target groups. At the same time, the effectiveness and efficiency of dissemination of information on job openings could be improved through the use of TV monitors instead of cards in the job information centres and by the establishment of information centres outside of full-service CECs. The effectiveness of the registration process must also be improved by the development of an improved skill coding system.

Staff time released through these changes, perhaps supplemented by limited additional resources, can be directed toward the provision of improved placement and information services to both workers and employers.

To make the service more attractive to employers, it is critical that job seekers be more carefully screened to ensure that employers receive suitable candidates. To achieve this, more time can be devoted to referral interviews and the officers conducting those interviews must have a better idea of employer requirements. Knowledge of employer requirements can only be improved if officers spend more time visiting employers, to gain knowl-

edge of job requirements, inform them of CEC services and encourage them to use the computerized job order facilities directly.

Improved service to employers will, over time, result in an increased flow of job orders, which will speed job placement and facilitate the monitoring of local labour market conditions for both UI and immigration purposes. A greater flow of job orders will also give CEC staff a fuller picture of local labour market conditions, so that they in turn can better inform employers of current local wage and working conditions for the type of labour being sought.

The Task Force is convinced — partly on the basis of recent experience in Vancouver and partly from interviews with employers — that a large increase in the volume of job orders will be forthcoming as a result of both improved service to employers and proper marketing of this service. More orders will mean improved service for job seekers and a decline in the amount of time job seekers spend in unemployment.

The Public Employment Service: Counselling and Consultative Services

At the present time, less than 20 per cent of CEC staff time is devoted to the provision of "intensive information," which we would define as counselling of workers and potential workers and special services to individual employers through the Manpower Consultative Service. Approximately two-thirds of this time is devoted to the selection and referral of over 300,000 candidates for institutional and industrial training courses under the Canada Manpower Training Program (CMTP) and Canada Manpower Industrial Training Program (CMITP), and to work related to these training programs. This appears to leave less than 7 per cent of staff time, about 500 person-years annually, for other intensive counselling services to workers and employers. Even this may be an over-estimate because many counsellors are also involved in administration of the large number of special programs handled by the CECs.

Over the last decade the proportion of resources devoted to general counselling services has clearly declined and the objectives of counselling services have become increasingly muddled. One of the most urgent needs is for clarification of CEIC objectives for counselling services, followed by reorganization and staffing of the CECs to provide those services.

A statement entitled "Employment Counselling in the CEIC" was approved by the Commission on June 17, 1980 and subsequently published. This statement provides a useful summary of the nature of employment

counselling, its relationship with labour market programs and the elements required in a counselling service. The general statement of policy simply states, however, that:

Clients who require employment counselling in order to achieve satisfactory placement shall receive it and employment counselling staff shall have the necessary competencies to deliver employment counselling effectively.

The policy does not address the central issue of priorities — of how the CECs, with limited resources and a wide range of functions to perform, can provide effective counselling to all clients who require it. It does not recognize that the time and effort required for effective counselling varies enormously across different people and geographical areas. Nor does it broach the question of whether some kinds of counselling might best be done by other levels of government, educational institutions and social agencies, and if so how the services of these agencies might be linked to the placement services provided by CECs. In our view these are examples of issues which must be addressed if a realistic role is to be established for the CEIC and if the joint potential of the CECs and other institutions is to be realized.

The Task Force has not had the time or resources to conduct a detailed investigation of these issues. We have, however, identified some changes which in our view would improve service in three basic types of intensive counselling currently provided by the CECs: vocational counselling; general manpower counselling including services for the hard-to-employ; and consultative services to facilitate economic adjustment.

Vocational Counselling

At the present time, CEC counsellors spend some time providing career counselling to youth and to labour force re-entrants. This career counselling is based on information provided by the CEIC intelligence system (described later in this chapter), generally available career counselling material, and a computer-based career orientation system called CHOICES which has been developed by CEIC.

There can be little doubt of the importance of improved career information and counselling. Several studies (e.g., Stager, 1981) have found that high school and post-secondary students derive relatively little career information from formal guidance sources.

The Carnegie Commission, in its 1973 review of post-secondary education in the United States, found that inadequate career information was one of the major problems to be solved. One of its recommendations was

that federal agencies take steps to improve the flow of current occupational information and make it available more promptly. They noted that recommendations by federal advisory committees and manpower experts have not led to much progress, and stressed the need to provide students with the best possible information to sensitize them to shifts in occupational demand.

The Task Force concludes that CEIC has a very important role to play in producing occupational information. Indeed, a well functioning labour market information system would uniquely qualify CEIC to provide such data. Efforts to produce such material should be increased and the range of material should be extended. At the same time, increased resources should be devoted to dissemination of this material to schools and colleges and directly to students and workers through television, newspaper inserts, and other publications.

While CEIC should produce material to assist in career counselling and make efforts to ensure wide distribution of this material, it is not at all evident that CECs should offer intensive career counselling services to individuals (with the exception of the hard-to-employ). To perform this function well using the CHOICES system developed by CEIC would require counsellors to spend at least three hours per client. Because of the cost and staff requirements of personal career counselling, only a limited number of clients could be seen. The Task Force thus concludes that direct provision of career counselling services should be restricted to the hardest-to-employ and to women re-entering the labour force, as these groups are unlikely to have access to alternative sources. With respect to youth, primary responsibility for counselling should be borne by the provinces, with the services delivered through the education system. The role of the CEIC should be to encourage better counselling in the schools and colleges and work with the schools and colleges to train counsellors and provide information for teachers and professional counsellors. In this way CEIC can play an effective role in reaching students and young workers and can disseminate career information in a cost-effective manner.

Employment Counselling

The important issue which remains to be considered relates to the mechanisms to be used to assist or counsel individuals to identify their employment possibilities, identify solutions to employment difficulties, and implement corrective action leading to integration into the labour market. Many new entrants and re-entrants to the labour force, disabled workers, workers with obsolete skills, and workers interested in changing industry or occupation require more from the employment service than just information on job prospects. They may

require assistance in selecting appropriate training courses and in developing the job search and personal skills which will enable them to find and hold a job. The role of CEIC in providing this type of assistance, generally called employment counselling, is the subject of this section.

The counselling process is conducted through a wide variety of institutions and mechanisms, including educational institutions and various social agencies. Many workers, re-entrants to the labour market and young people who have dropped out of the school system, do not have access to the counselling services of the education system and must be served through other means. These people form a large proportion of the clientele of the CECs.

Increasing concern has been expressed, both within the CEIC and by outside observers, that the counselling process is relatively ineffective, that its ineffectiveness has had a major negative impact on the success of labour market programs, and that it has not adequately served the needs of the disadvantaged, particularly of women and Native people. For example, Goldfarb (1980) found that of those dissatisfied with the service at the CECs, almost half indicated dissatisfaction with the services and advice provided by personnel. Within the CEIC there is concern that too much counselling is purely reactive in nature and does not include sufficient analysis of individuals' problems. There is a feeling that in trying to do too much with limited resources, the CEIC is limiting its effectiveness. In counselling, as in other aspects of their activities, there is potential for streamlining and improving operations.

In one important respect, counselling activities could probably be more effectively conducted through a specialized unit linked to the resources of the CEC and closely connected to the community. Members of special target groups have frequently argued that their needs are not adequately met through the use of CECs. It is argued, for example, that CEC counsellors overwhelmingly stream women into traditional occupations and do not provide complete information on alternative career possibilities and prospects. The CEIC has responded to these concerns by placing women's employment coordinators in the regions to ensure that national policies on women are reflected in regional operations. However, the feeling persists that CEC counsellors are not sufficiently sensitized to the needs and problems of women and that streaming into traditionally female occupations continues to a considerable extent.

It is argued that Native people similarly lack access to job information and that CECs are not adequately organized to use non-traditional mechanisms to convey information to them. The Outreach Program was devel-

oped to use community-based agencies in providing personalized employment-related services to Native people and members of other target groups experiencing special difficulties. This program has been successful in bringing services and information to these groups but is separated from the regular services of the CECs and has a limited capacity to refer clients to placement or training. This sometimes creates a sense of competition between Outreach workers and placement officers, and adds to the frustration of the client when the excellent in-depth counselling provided does not result in employment or training.

To deliver effective services to those who require intensive counselling, it would appear that counsellors must be prepared to spend a considerable number of hours with a client over an extended period of time. Such extensive counselling is very expensive. The expense and the lack of data on the effectiveness of counselling leads the Task Force to conclude that CEIC should restrict intensive counselling services to the hard-to-employ and to special needs groups. For most clients the CECs should concentrate on the provision of high-quality extensive information and not attempt to provide intensive counselling services.

The question of how to deliver intensive counselling services to the hard-to-employ is an extremely difficult one. More research and experimentation is required before any definitive answer can be given. The Task Force recommends that CEIC continue to experiment with alternative modes of delivery to ascertain which work best in particular circumstances. However, based on our observations, we think that more emphasis should be placed on special units or satellites able to reach out to the communities they serve and linked to the CEIC employment service. Such satellites are probably most effective in providing the range of services required, including specialized pre- and post-employment counselling, marketing of clients to employers and directing them to appropriate training. Such satellite units would complement the program delivery services of CECs by providing intensive counselling geared to the needs of particular groups and directing clients to appropriate employment or training. An adequate level of funding is required to establish the linkages and make the service more widely available.

For special target groups and the hard-to-employ in general, a broad range of post-employment support services is indicated. Such services involve the provision of advice to employers on integrating these groups into internal labour markets, as well as ensuring that employers have access to assistance with training, workplace modification and setting up of other supports when required. These needs are discussed in more detail in Chapter Six.

Finally it is important that officers in these satellites develop contacts with employers who are willing to take on the hard-to-employ. These may be employers who do not normally use CECs to fill regular vacancies but who could be persuaded to take on a few "manpower people" and give them the extra supervision usually required initially. By offering post-employment support services, the counselling satellites should be more successful in finding willing employers than CECs have been to date.

Consultative Services

As part of the ongoing process of industrial change, workers and firms must continuously adapt to new demand situations. Thus firms must sometimes lay off or recruit a large number of workers in a short space of time, which can be very disruptive to a local market. This disruption can be minimized by advance planning and the use of services provided by CEIC.

When large-scale layoffs are imminent, there are several critical issues in achieving a speedy and effective process.

- Workers should be given as much advance notice as possible.
- Information on job opportunities and prospects in related industries, occupations and areas should be assembled and distributed as early and effectively as possible.
- Joint examination of adjustment problems, solutions and appropriate use of labour market programs should be made by employers, employees and the CEIC.

Advance notification of layoffs has been a requirement in the Canada Labour Code and the labour legislation of many provinces for some time. The CECs are the primary sources of information and access to available remedial measures and the CEIC's Manpower Consultative Service is available to facilitate employee/employer resolutions of adjustment problems and to coordinate the application of labour market and industrial assistance programs where appropriate.

The Manpower Consultative Service helps employers, employees and members of small communities work together to solve their problems of industrial adjustment. The program's key mechanism is the joint consultation committee, comprising representatives of workers, management and communities, organized and chaired by an independent private citizen. MCS officers encourage and facilitate the establishment of these private sector committees, serving as their resource personnel

and providing a link with other labour market services and programs.

The service has proved to be generally effective, but a recent assessment of MCS (Dept. of Employment and Immigration, May 1980) based on interviews with past committee chairmen identified several ways in which the operation of committees could be made more effective.

- Lack of cooperation of other federal agencies, particularly those involved in providing assistance to industry, was identified as a major barrier to effectiveness.
- Closer integration of MCS and CEC activity and more community outreach and on-site program delivery by experienced CEC counsellors was considered necessary. Although the CECs cooperated willingly with requests for assistance, they were judged to be more reactive than initiating.
- The view was expressed that MCS could be more widely used than it now is and that awareness of its existence could be promoted through more publicity among the business and labour communities.

The imperatives of early warning, program coordination, and program flexibility have long been recognized in assessing and prescribing processes to deal effectively with cases of industrial adjustment. The government has recently announced a series of measures to improve the timeliness and coordination of its response to situations of industrial dislocation which, in addition to a number of new and improved programs, include requirements for increased advance notice of layoffs in industries under federal jurisdiction and a process to coordinate the federal response in cases where communities are severely affected.

A good labour market intelligence system is required to facilitate early warning. The role of the federal government in creating such a system is the concern of the next section.

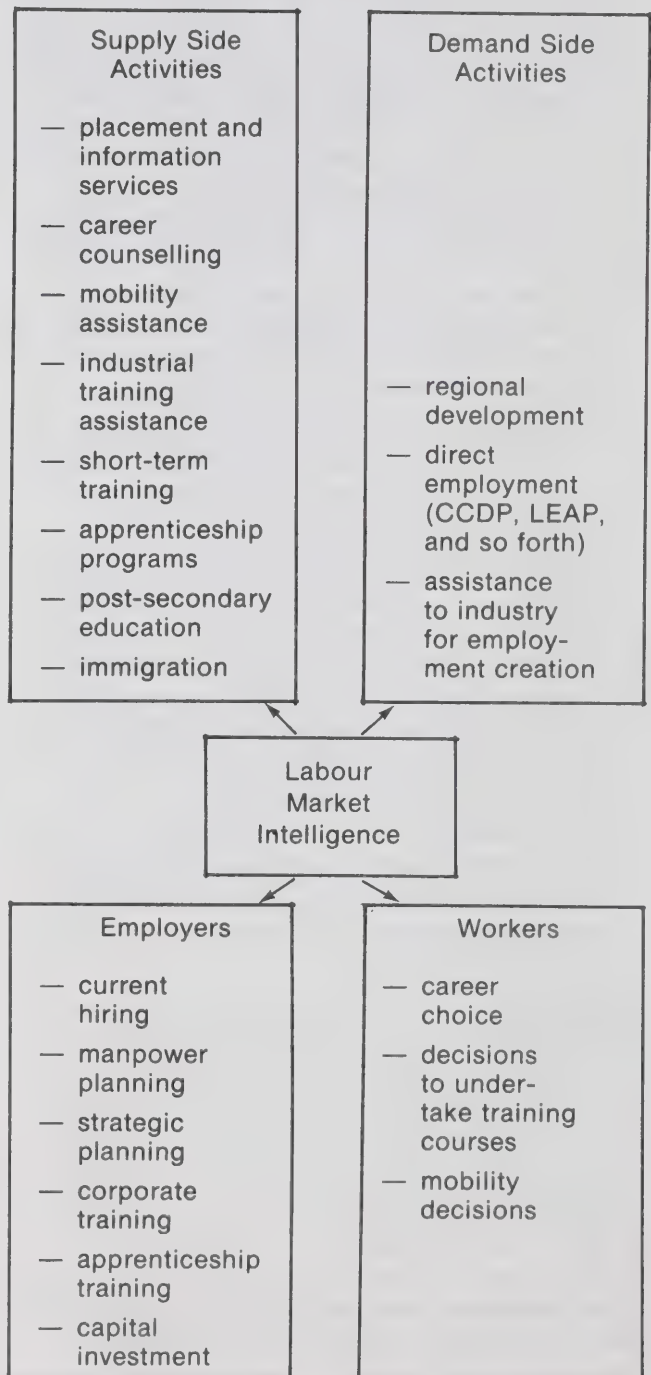
Labour Market Intelligence

Labour market intelligence refers to information on the current state of the labour market and on changes in the structure of labour demand and supply which are likely to occur in the medium and long term. Firms require such knowledge to make intelligent decisions about hiring, manpower planning and strategic planning. Workers and students require it for purposes of career choice and mobility decisions, and federal and provincial governments for purposes of planning, training and manpower programs. The Task Force has examined existing labour market intelligence systems and finds

them inadequate to meet these needs. A major restructuring and expansion of the federal intelligence effort is required.

The labour market intelligence function can be conceptualized as providing the fundamental underpinning for both supply and demand side activities of governments and for the information requirements of workers and employers, as shown in Figure 5-3 below.

Figure 5-3



In order to meet the needs of governments, employers and workers, a labour market intelligence system must meet the following criteria.

- It must supplement adequate information on the current state of the labour market for placement and hiring purposes by providing a medium-term outlook for manpower planning, mobility and training purposes; and a long-term outlook for strategic corporate planning, career decisions, planning and training programs and for government activities to stimulate demand.
- The time horizon must be consistent with the needs of employers, workers and governments. These range from current information on labour market conditions for placement and hiring purposes to medium to long term information for guiding post-secondary schooling and many forms of demand intervention.
- Information should be renewable. The system should be set up so that both short-run and long-run needs can be updated to include the impact of changing environment.
- A range of estimates should be provided. Given the uncertain nature of most of the demand forecasts, potential variance in forecast data should be included.
- Information should be disaggregated in a meaningful manner. It should be subdivided by skill categories that are consistent with the differentiation established by demand (i.e., the interchangeability in the workplace between industries) and supply (i.e., the training and certification procedures). It should also be subdivided geographically into separate regional requirements.
- The intelligence system must have access to expertise in both the public and private sectors. Regular inputs from labour unions, industrial firms, financial institutions, provincial governments and federal agencies are required.

The development of an information system having these attributes should greatly enhance the efficiency of operation of labour markets and the effectiveness of both supply and demand side expenditures of governments. On the basis of this information, governments can take action to reduce mismatches that result in coexisting surpluses and shortages in occupations and regions.

At the present time, information on the prospects for labour demand and supply in the aggregate, by industry and/or by occupation, is collected and analyzed by a number of institutions, both public and private. The

major basic sources of statistical information are drawn from regular Statistics Canada surveys such as the *Labour Force Survey* and the now defunct *Job Vacancy Survey* and *Occupational Employment Survey*, as well as the decennial census. This information is supplemented by data from occasional Statistics Canada surveys, administrative records of CEIC, surveys and forecasts compiled by organizations such as the Conference Board in Canada, Technical Services Council, and industrial and professional associations, and by special analyses undertaken by CEIC and other federal and provincial agencies.

Most labour market analysis, including that of occupational demand, has been conducted using a mechanical approach to generate estimates of supply and demand based on quantitative macroeconomic projections, such as CEIC's occupational forecasting exercise (COFOR). There is a broad-based consensus in industry that such analysis is not sufficient and that improved intelligence and analysis are needed. For example, the Business Council on National Issues and the Canadian Labour Congress have proposed the establishment of an "Industrial Labour Market Institute" totally independent of the employment service, in part to provide analysis of impending labour market problems by tapping the tremendous store of practical know-how which business and labour possess. In 1978, a number of the Sector Task Forces (Tier 1 committees) also identified the lack of statistical information on the long-term demand for skills as a serious problem.

In spite of such criticisms, there will always be an important need to tie manpower supply and demand forecasts in with both highly aggregated statistical data and macroeconomic forecasts. However, it is the view of the Task Force that very substantive advances can be made through more effective and widespread use of microeconomic data.

Market Intelligence

A major objective of the labour market intelligence system must be to develop regional demand forecasts of labour skills for the medium and longer term. There are two complementary microeconomic approaches for obtaining the desired data.

- The first approach uses *manpower planning* information developed by individual firms for the near term (two to three years). For some time the federal government has been encouraging firms to increase the level of forward planning of their manpower requirements. An aggregation of these manpower planning data could be utilized by the

federal government to determine labour demands by industry and by location for the short term.

- The second approach relies on the development of five-to-ten-year *sector scenarios*. In this approach, the initial focus is on developing the forecast characteristics of the various sectors of the economy (their output, technological change, international competitiveness, and so on). After developing an overall forecast for each of the individual sectors of the economy, this information is disaggregated to develop forecasts by location and by skill. Demands for occupations for various geographic regions can be obtained by aggregating the detailed information from the sector breakdowns.

The two approaches together produce the richness of data that is absolutely essential for improving the effectiveness of demand and supply side interventions. The macroeconomic information described earlier serves as a check to ensure that the overall totals are in line with a reasonable aggregate level of economic activity and employment.

The Task Force worked with 150 corporations in Alberta, Ontario, Quebec, and Nova Scotia to evaluate the availability of manpower planning information¹. We found it important that any analysis of manpower planning activity be considered within the context of the firm's other planning activities. The extent of forward planning varies considerably with the size and sophistication of the company's operations. In general, for the larger enterprises the following activities are involved.

- First, a strategic plan examines the broad parameters with respect to products, markets, technology, finance, and other factors in the longer term (five to ten years).
- Second, capital budgets detail the requirements for new facilities. These projections normally extend about five years and are developed to determine financial requirements.
- Third, operating budgets detail the level of production, input requirements and so forth for periods up to five years. It has been our experience that while firms may develop these plans for long periods, they rely on them primarily for information with respect to the immediate upcoming year. In contrast to capital budgets and strategic plans that are updated only periodically (perhaps once or twice a year), operating budgets or plans normally are updated monthly).

Planning processes for smaller companies usually are much less sophisticated. Some of the smallest operations

may exist with nothing more than a month-to-month cash budget.

The extent of strategic planning, capital budgets, and operating plans determines in large measure the ability of the firm to forecast manpower requirements. If the determination of personnel needs is not linked closely with the overall planning process within the enterprise, its accuracy is questionable. Independently generated manpower plans (e.g., a simple extrapolation of existing levels) can be reliable only in very stable situations where an extension of past trends provides a reasonable prediction. In the vast majority of cases, however, the existing planning framework defines the outer limit of possibilities for obtaining detailed manpower requirements by skill and location.

The analysis of the existing strategic, operating, and manpower plans in the 150 firms revealed the following.

- Practically all firms (over 90 per cent) considered that they were doing some manpower planning. However, further analysis revealed that only about one-half of the firms had developed manpower information in sufficient detail or extensiveness to be truly meaningful.
- Those firms doing manpower planning considered the information to be of adequate accuracy only two years in advance. Beyond that period the confidence decreased markedly.
- The forecast period for which reliable information could be developed did not vary appreciably for managerial, professional and high skilled trades.
- As expected, company size was a most important variable in explaining the level of manpower planning. In general, firms having less than 1000 employees conducted much less planning.
- The firms were very receptive to supplying their manpower forecasts to a centralized data bank provided by government, so long as confidentiality could be assured.
- Manpower planning efforts varied significantly by skill category. Extensive planning was conducted for managerial, professional and high skill trades levels. Clerical, semi-skilled and unskilled trades received less attention.
- The FOIL and COFOR data were essentially not used by firms for forecasting purposes. Approximately one-half the firms did not know of their existence and those that were familiar with them did not use them. We found that only one firm in the sample relied to a significant extent on this type of information.

¹ Details are reported in a paper prepared for the Task Force by R. J. Clifford and Associates.

The Task Force analysis suggests the following with respect to the government's role in manpower planning.

- Any development of manpower planning procedures within firms will have to build on the perceived needs within the companies. In our view, it would be extremely difficult for government to influence the firms' manpower planning activities in a meaningful manner unless the firms themselves perceive a need.
- We are optimistic about the possibilities of the federal government establishing a network to obtain aggregate forecasts of labour demands by skill category for highly skilled professional and technical employees. Implementing this system should be done on a regional basis and should involve the larger firms with forecasting capabilities. The development of a national system could be delayed until the regional system is operating satisfactorily.
- The federal government should make available a small pool of expertise to provide, on request, advice on implementing a manpower planning system.
- Where industry associations have already developed a cooperative effort in manpower planning (e.g., the aerospace sector in Quebec), this should be encouraged and a close liaison established with any federal government regional planning effort.

The budgetary expenditures on long lead-time labour supply programs — post-secondary training and apprentice training — suggests that the prime emphasis of the government's involvement in demand forecasting should be on the five-year time horizon. It is precisely in those occupations requiring more than two years of education or training that difficult-to-solve imbalances are evident — engineers, skilled trades, and so on. For this reason the Task Force suggests that the federal government consider seriously an active involvement in developing sector scenarios.

The information required for forecasts varies with the time horizon. The overall information package for short to long term forecasting can be considered to be comprised of two components.

- Factual information (existing quantitative evidence from firms, governments, industry associations, etc.) is reliable and useful in the short run but is of only limited application in the five-to-ten-year time horizon.
- Deductive and speculative information (the impressions from informed participants in an industry with respect to the anticipated trends in demand, pricing, technology and other factors) becomes

increasingly important as the time period of the scenario is extended.

The development of sector scenarios requires a very significant reliance on deductive and speculative information. Factual, deductive and speculative information can be subdivided into secondary sources (published data by firms, associations, etc.) and primary sources (personal contacts with companies, financial institutions, public servants and other industry experts). In developing the key deductive and speculative information, very significant emphasis should be placed on the direct participation of those knowledgeable in the particular sector.

What types of information can best be developed by relying on obtaining deductive and speculative information from primary sources? The experience in utilizing the approaches at DREE and IT&C to examine industrial development opportunities suggest the following examples:

- detailed as opposed to aggregate forecasts with respect to changes in product mix, country and firm growth, pricing strategies, technology, transportation, financing and so on;
- the medium and long term directions of the international and interregional competitiveness of Canadian sectors; and
- expected changes and implications of the regulatory framework, tariffs, quotas, taxation and incentives of other governments.

To illustrate and further examine the usefulness of the sector scenario approach, the Task Force commissioned analyses of the following sectors: construction (by B. A. Keys and D. M. Caskie); hospitality (by S. E. Moreau); finance, insurance and real estate (by A. E. Daley); automotive (by N. B. MacDonald); machinery (by Peat Marwick); and electronics (by H. Schwartz).

In summary, the Task Force suggests that the federal government should rely to a very significant extent on the direct involvement of industry experts in developing medium and long term estimates of labour demand. These longer term estimates will be of primary importance in improving the efficiency and effectiveness of education and training expenditures in key occupations.

Institutional Framework

With the notable exception of a few associations such as the Machinery and Equipment Manufacturers' Association, Air Industries Association, and Automotive Parts

Manufacturers Association, there is very little capacity in private industry or government to provide adequate sector scenarios. In general, industry associations do not have the technical capacity to carry out this sort of exercise and, to date, the only federal departments capable of this sort of aggregation, DREE and IT&C, have devoted little effort to the manpower aspect of industrial development. Such capacity should be developed.

At the provincial and national levels there is little capacity in either the public or private sector to aggregate industrial sector information. For this reason among others, the BCNI and Canadian Labour Congress have proposed an Industrial Labour Market Institute, and several provincial departments of labour have begun to expand their integrative and analytical capacities. The federal government, through CEIC, has not expanded its capacity in this area, however. Clearly such improvements in the integrative capacity of labour market intelligence must be developed if bottom-up analysis is to become useful for the purpose of developing improved labour market policy.

Because of its network of local offices, access to UI data, immigration data and other administrative data, heavy involvement in manpower training, and the day-to-day management of the employment service, CEIC should be in an excellent position to carry out such sector analysis in a cost-effective manner. At present CEIC is hampered in this task by two factors: lack of a labour market intelligence service devoted to this function; and inadequate inputs from the private sector. These deficiencies must be overcome if CEIC is to play the role which it is capable of playing. Although there are many ways of overcoming these deficiencies, the Task Force concludes that two innovations would be most useful.

First, a set of National Industrial Manpower Committees should be formed — one for each major sector:

- to encourage corporate manpower planning;
- to aggregate information from corporate manpower plans;
- to provide inputs for the preparation of scenarios of sectorial manpower requirements over the medium term;
- to identify potential manpower strategies and skill bottlenecks; and
- to suggest ways of alleviating these bottlenecks through training and other structural solutions.

The committees should consist of representatives from large firms, industry associations and unions, with provincial and federal officials serving as *ex officio* members. Subcommittees could be formed to focus on par-

ticular issues. Staff support would be available from the Labour Market Intelligence Service. The size and structure of the committees would vary by sector.

Committee operations would be conducted in parallel with broader business-government consultative processes. In this connection, the Department of Industry, Trade and Commerce would be the leading federal-government participant.

Second, a small Labour Market Intelligence Service should be established within CEIC:

- to aggregate administrative data;
- to aggregate data from local labour market information officers at the CECs;
- to assist the National Committees in the preparation of sector scenarios;
- to aggregate the sector scenarios and reconcile them with evidence from macroeconomic models and from other government departments;
- to prepare material to assist CEC information officers and counsellors;
- to prepare material to assist in career choice; and
- to disseminate this information to the private sector, provincial governments and other federal departments.

In aggregating data and preparing sector scenarios, both the National Manpower Committees and the Labour Market Intelligence Service would give special attention to the regional aspects of economic activities and labour markets, developing the national picture from an aggregation of regional perspectives. Regional offices of federal government departments should be most helpful in this regard.

The establishment of National Industrial Manpower Committees and the Labour Market Intelligence Service would greatly improve the quantity and quality of information about future labour market developments to assist firms, training institutions and governments in formulating policies to ensure adequate supplies of skilled manpower in Canada. By tying in the existing information and resources within CEIC, this structure should prove cost-efficient. Moreover, the committee structure would serve to make CEIC more responsive to private sector needs.

Conclusions

The analysis of this chapter has led to a number of important conclusions related to the role of the public employment service, the provision of labour market information and intelligence, and the dissemination and use of this information by workers and employers.

With respect to current labour market information and placement, the Task Force has reached the following conclusions.

- Provision of current labour market information at the national level is desirable and contributes to the efficient operation of labour markets.
- It is crucial to convey information on jobs to workers as quickly as possible, particularly through an expanded MOPS automated job order system and the National Job Bank.
- Information on jobs must relate to the skills required to perform them. The development and implementation of an improved classification system should be given high priority.
- The costly process of registering all job searchers at CECs should be discontinued. Registration is only useful for skills in short supply, markets characterized by general excess demand for workers, and members of target groups affected by affirmative action programs.
- CEC staff need to view their function much more than they have as being one of providing information to workers and employers.
- CECs should place more emphasis on the provision of high quality light screening of workers prior to referral to ensure that they are likely to meet employers' needs. In this way, employer satisfaction will increase and more job orders will be placed with the service.

Improved functioning of the labour market and the efficient operation of labour market programs require effective counselling of students and of individuals with problems in obtaining or keeping employment. The Task Force has drawn the following conclusions with respect to vocational and employment counselling.

- Vocational counselling of students should be primarily the responsibility of provincial governments and should be provided through the education system with the federal government, through the CEIC, providing support material. This support material would include labour market intelligence, specific vocational information and vocational counselling tools.
- With respect to employment counselling of people outside the education system, there is a role for the CECs. Counselling of special groups, such as women re-entering the labour force and Native people, would probably be more effectively done through satellite Outreach units staffed by people sensitive to the needs of the groups, with access to the CECs for employment and program services.

More experimentation is required, however, to assess the best means of delivering these services. Such services are expensive and increased funding will be required if they are to be widely available to disadvantaged workers.

- For groups of workers affected by industrial dislocation, the Manpower Consultative Service is an effective device. Implementation of the community adjustment process, recently announced by the federal government, should provide far improved response to the needs of affected communities.

There is an urgent need for the development of better labour market intelligence on prospective demand for and supply of workers in the aggregate, and by region, industry and occupation. To achieve this, CEIC's approach to intelligence needs must change. A number of institutional changes are required.

- There is currently too much emphasis on aggregate analysis and not enough on the gathering and analysis of more disaggregated information.
- For the short run (i.e., the immediate two years), the aggregation of corporate manpower plans could provide a good understanding of disaggregated labour requirements. The usefulness of this type of information is limited, however, because many supply and demand side adjustments cannot be made within the two-year period.
- For the medium and long term (i.e., over two years), the Task Force suggests that sector scenarios be developed for industries and regions to anticipate the significant surpluses or shortages. Because of the long lead times required to develop skilled labour and the built-in friction to adjusting to different conditions, the development of these sector profiles is important and could contribute significantly to increasing the productivity of workers.
- A number of National Industrial Manpower Committees should be formed, one for each major sector of the economy, to encourage manpower planning among firms, prepare medium-term scenarios of sectoral labour requirements, identify potential bottlenecks and suggest strategies for alleviating them.
- A small Labour Market Intelligence Service should be established within the CEIC to aggregate data from local and sectoral sources, reconcile them with macroeconomic evidence and disseminate the information to the private sector, provincial governments and other federal departments.

Most of the improvements set out above can be brought about by CEIC within existing resource con-

straints through the reallocation of personnel between functions. Some additional resources will undoubtedly be required if intensive counselling services for the hard-to-employ are to be expanded, but this should be done gradually and monitored carefully in order to determine the most effective way to deliver these services. Additional resources will also be required on an ongoing basis for the expanded intelligence function and

on a one-shot basis for the rapid introduction of the MOPS System in all metropolitan areas. In sum, a major improvement in the public employment service can be brought about with only a small increase in the resources devoted to it.

This chapter benefited from a report prepared for the Task Force by R. J. Clifford and Associates entitled "Survey of Manpower Planning Practices in Canada."

Chapter Six

Improving Opportunities for Groups with Special Employment Needs

Increased emphasis on labour market information and an improved role for the Canada Employment Centres in job information, proposed in Chapter Five, will assist many who experience employment problems, but clearly this is only part of the answer. It is necessary to examine the implications for labour market policy of continuing major inequities in employment, income and status in Canadian society for certain groups.

Women, Native peoples, the disabled, youths and older workers have experienced long-term employment problems. For some groups, these include frequent and lengthy periods of unemployment and low and sporadic participation in the work force, while for others the major problem is lower occupational status related to dead-end or temporary jobs and consequently lower incomes. Not all members of each group experience labour market problems to the same extent, but belonging to these groups implies a disproportionate probability of labour market problems relative to the rest of the work force. The persistence and seriousness of such problems require labour market planners to look more closely at their causes and to design policy to overcome the complex barriers in the labour market which result in the exclusion of broad groups of Canadian workers from full participation.

A strong restatement of the government's commitment to overcoming these problems was made in the Speech from the Throne in April 1980. The speech referred to the need for improved employment opportunity and training programs for women, Native peoples, youth, the elderly and disabled people, and pledged that the government, as a major employer, would "play a leadership role by implementing affirmative action measures in the public service."

This strong renewal of federal commitment to employment assistance comes at a highly appropriate time. Projected slower labour force growth and limited availability of skilled workers through immigration, accompanied by increased female participation rates and a burgeoning Native population, indicate that these groups will play a critical role in maintaining an ade-

quate and stable work force. They are projected to account for 75 to 80 per cent of labour force growth in the 1980s. While women's participation rates will continue to rise, women remain largely concentrated in a limited number of occupations. It is unclear whether the Native people reaching labour force age in the 1980s will successfully enter the labour market. Disabled workers continue to face complex employment barriers and a portion of young people and older workers experience long periods of unemployment. It is the Task Force's view that failure to utilize these groups fully will unnecessarily inhibit economic growth by restricting potential labour force growth. In addition, continued underutilization of already developed skills and abilities, particularly those of women, will act as a drag on improvement in productivity.

In Chapters One and Two, we discussed the goals of government, reflecting that labour market policies of the 1960s were increasingly governed by equity considerations. These policies responded to concerns about the marked disparities of employment opportunities and income across the various regions and groups of workers. Interventions to improve equity were reflected in increased unemployment insurance and in development of basic training and job creation programs.

Although these policies were intended to reduce disparities and to integrate into the work force those experiencing severe employment problems, they resulted in limited gains and frequently continued to hold the workers they were designed to assist at the margin of the work force.

Inherent in these past policies has been the view that "ownership" of the employment problem rested with the individuals or groups rather than with their circumstances and with barriers in society and in the labour market. This approach, which forms the backbone of most past policies, failed to consider the barriers in the employment system itself, and concentrated on the perceived skill deficiencies of the individual as defined by market requirements. With the problem defined primarily in these terms, remedial measures have aimed

at expanding the individual's or group's store of "human capital" and have not sought to alter demand. For target group members this approach has too often been reduced to providing repeated periods of low-level training, temporary job creation and segregated job-experience training.

Past policies also viewed the failure of employers to hire members of certain groups as employment discrimination, an indication of employers' prejudice or ill will against a group. In response to intentional employment discrimination as a labour market barrier, legislation has been enacted which prohibits employers from consciously denying employment or employment-related benefits because of sex, age or minority status. In addition, programs have aimed at changing attitudes and ensuring equitable treatment.

But despite programs to improve employment qualifications and counter discrimination, there has only been a marginal impact on the unequal returns to certain groups participating in the labour market. For example, in the past decade high Native unemployment rates have not decreased and the gap between women's and men's wages has widened in some occupations. Part of the failure can be tied to the way these programs have been conceived and implemented. To the extent that training and job creation have been used as a "holding tank," efforts have been confined to temporary rather than long-term solutions. While the skills of some individuals have been improved, programs for target groups have lacked long-term employment and development goals. Programs to overcome intentional discrimination have been relatively sparse and judicial remedies have proved to be limited and time consuming.

The Task Force believes that the traditional approach has neglected to deal adequately with problems internal to social and labour market structures. It has become clear to labour and human rights experts that employment discrimination is a far more complex and pervasive phenomenon than was generally understood. Some employment practices, while equal in intent and in application, have a disparate effect on certain groups. In many cases, such exclusionary practices are unrelated to job performance or the safe operation of a business. For example, an employer who uses a word-of-mouth recruitment system when there are few target group members in the firm's operation will tend to replicate the racial and sexual make-up of the company's existing work force and continue to exclude target group members. Height and weight requirements and artificially high education and experience requirements will also act as barriers to their employment. While individual employers may still influence employment patterns due to prejudice or sexism, the more significant basis of

employment discrimination resides in the employment system itself. Employment discrimination based on institutional patterns and practices is known as "systemic" discrimination.

The concept of systemic discrimination is useful in explaining barriers in the labour market. It may be equally relevant for explaining the causes for unequal distribution of certain groups in training and skill development programs designed to improve the employment qualifications of potential labour market participants.

In summary, it is our view that traditional human capital and anti-discriminatory policies have not only lacked the necessary elements to succeed, but have been at best only partial responses. Policies which have aimed at changing the nature of the labour force characteristics of target group members without placing sufficient emphasis on altering the demand for these workers have not produced the required degree of change. An effective labour market planning approach must be based on an accurate assessment of those elements which operate to exclude certain groups from full participation. Only then can planners develop a comprehensive response based on the need to develop required skills, change unacceptable behaviours and remove unnecessary systemic demand barriers. Such an integrated approach will avoid the built-in failure resulting from a one-dimensional assessment of the problem. A comprehensive approach to the employment problems of target groups will contribute to the government's goals of improving equity and economic productivity, as efficiency in the labour market is enhanced by efforts to assure all workers the opportunity to develop and participate as fully as possible.

This approach will enable individuals from target groups to be adequately served by the labour market framework policies discussed in other chapters. At the same time, we emphasize that it is critical that they receive additional program support tailored to the specific needs and problems of each group and that these programs be operated as mainline programs of the CEIC.

Those labour market participants often designated as "special needs" participants cannot be left on the margin of labour market planning. Their numbers, their significance to the operation of the Canadian economy, and the complexity of the required response mean that they will have to be fully integrated in the policies developed for the 1980s.

The dimensions of the problems experienced by members of target groups suggest two classes of problems — those of entry or re-entry into the labour market, and

those of promotion and job development. Although the barriers differ for these two levels of concern and the instruments needed to remove them may also vary, access is the fundamental problem and must be assured at all levels. Within both the pre-market and market structures which determine the employment and career framework for these workers, intentional and systemic barriers operate as external forces which impede the access and progression of these groups and restrict their contribution to the economy.

It is the Task Force's view that CEIC can play a central role spanning both the pre-market development of skilled workers and the labour market demand for these workers. First, CEIC can play a role in ensuring that barriers on the demand side of the labour market are removed. It follows, then, that the CEIC employment system must be able to respond to employers' requests and provide qualified and trained personnel. This will require an ability to ensure a suitable supply of target group workers for employers through effective marketing, recruitment, career counselling and training.

The purpose of this chapter is to propose an integrated policy framework for improving employment opportunities for target groups. This framework is premised on both the need to accept the multidimensional causes of current problems and the importance of recognizing the significance of these groups as a source of labour supply over the next decade. We have already noted the crucial role of the target groups in labour force growth during the 1980s, and the consequent importance of facilitating both their entry and advancement in the labour market. Since removing barriers to participation stemming from causes internal to the labour market is of prime importance, we have examined the ways that causes of exclusion and underutilization of target groups have traditionally been defined, arguing that the problem of systemic discrimination has not received adequate attention. While remedies aimed at overcoming the underdevelopment of "human capital" and intentional discrimination should not be abandoned, we feel that failure to emphasize demand-side policies and to recognize the barriers created by certain unnecessary labour market practices seriously undermines the impact of these remedies.

We provide next a brief analysis of the characteristics of the target groups and the specific situations they face. The groups the Task Force has focused on include women, people of Native ancestry, disabled persons, youth and older workers.

We then provide the framework for situating successful remedies and outline the implications for labour market policy. A three-part framework is recommended.

It includes initiatives to remove barriers and influence the demand side of the market, to develop better skill development programs on the supply side and to provide appropriate market mechanisms to support these initiatives. Under each of these three areas, broad policy directions are indicated. Throughout the chapter, references are made to other parts of this Report which deal with specific policies in greater detail.

Who Are the Target Groups?

Women, Native peoples, disabled persons, youths and older workers are all groups which encounter a disproportionate number of employment barriers. These range from finding and holding entry-level jobs, to gaining access to a full range of occupations, to progressing upwards as far as individual ability and motivation permit. Because of the complexity of the employment barriers and the situation of each group, their positions in the labour market are described below.

The Task Force recognizes that other individuals and groups experience similar employment problems, but we have chosen to focus our attention on the labour market situation of these groups because they will play a significant role in the labour force growth of the 1980s. The policies and measures required to improve the position of these target groups will have broader application for those others experiencing similar labour market problems.

Women

Women have always worked. However, historically, most women have not worked for pay and therefore were not counted as members of the labour force. Thus the work done by women went largely unrecognized until they became "real workers" by entering paid employment.

Approximately half of all Canadian women of working age are presently in the labour force (compared with approximately 78 per cent of working-age men). Female participation, which has been rising steadily since the early 1950s, is expected to approach the male participation rate by the year 2000. Over the 1980s, it is projected to account for about 65 per cent of labour force growth. This growth in female participation reflects some significant social trends—smaller families, rising divorce rates, changing views about male and female roles. More women are solely dependent on their own earnings, and many of them are also supporting families.

While more women, married and single, with and without children, are joining the labour force, other sources of labour force growth are declining. The male

participation rate is falling somewhat, due primarily to a decline in participation of older workers; the youth labour force is declining, reflecting lower birthrates of the late 1950s and early 60s; and immigration is no longer as important a source of skilled and highly trained labour.

At the same time, technological changes are altering the structure of labour demand. The expanding use of microelectronics in the office could have a dramatic effect on the clerical sector, which until now has been growing at a rate equal to or greater than the growing population of women workers. Microelectronics can be expected not only to reduce the rate of growth of jobs in the clerical sector but also to transform the skill requirements (Menzies, 1980). Some will be high skilled, demanding new kinds of training and offering new challenges, while others will be low skilled, with the possibility of an assembly-line type of control.

Women encounter barriers in the labour market in relation to both entry and progression. Although many women seeking to work are able to find a job at the low-pay, low-skill level, these entry-level jobs for women are, for the most part, restricted to certain traditional areas and to jobs with little or no promotion opportunities. While the extent of female involvement in the Canadian labour force has changed quite dramatically in the last 30 years, the nature of their participation has remained remarkably stable. Women have been, and continue to be, concentrated in a relatively small number of occupations and industries.

In 1980 over 60 per cent of all women worked in three occupational categories: clerical, sales and services. If occupations in teaching, medicine and health are included, approximately 78 per cent of employed women are accounted for. Male-dominated jobs in processing, machining, product fabricating, construction trades, transport and other equipment operating and materials handling, together comprise only 10 per cent of female employment.

Women are also concentrated in certain industries in our economy. They are greatly under-represented in the goods-producing sector and greatly over-represented in the service-producing sector. Women are beginning to enter a wider range of occupations and industries, as noted in Chapter Two, but the proportion of women in many traditionally male occupations remains very small.

In addition to their disproportionate concentration in certain occupations and industries, women are disproportionately represented among the unemployed. Although they form 40 per cent of the labour force, women account for 45 per cent of total unemployment. The pattern which emerges when occupational, industri-

al and regional aspects are considered, is the consistency with which female unemployment rates exceed those of men.

Furthermore, women are less protected from wage and salary discrimination and from unemployment because fewer of them are union members than men. In 1978, barely 20 per cent of all women in the labour force were unionized, compared to 31 per cent of the male labour force.

Data on incomes and wage rates further expose the inferior position of women in the Canadian labour market. In 1978, the latest year for which income data are available, full-year women workers earned, on average, \$10,098, about 58 per cent of the average male income. This wage gap has shown little sign of closing. Average male earnings exceed average female earnings in all occupational groups, even those dominated by women.

After accounting for male-female differences in the work year, occupational distribution, experience and education, an unexplained differential between male and female wages persists. As Sylvia Ostry (1968) concluded, "It seems clear that some portion of the residual differential stemmed from 'discrimination', i.e., from the fact that women were paid less than men for comparable work" (p. 42).

Ostry's estimate of a 15-22 per cent earnings gap due to discrimination was based on male and female wages for comparable work without investigating the comparable worth of male and female jobs. As such, it represents only a minimum estimate of the wage gap. The undervaluing of work done by women is a factor which must also be considered.

The Women's Bureau, Labour Canada (1975, p.83) attempted to control for age and level of education in comparing incomes of male and female full-time, full-year workers in 147 selected occupations. Even when these factors were taken into account, men's earnings exceeded those of women in 94.2 per cent of the cases.

Similarly, male wage rates are higher than female wage rates even when the jobs are in the same industry. Data on wage rates by sex were collected by the Women's Bureau, Labour Canada (1979) for 70 similarly described occupations in the same industries. In only two cases did female wage rates exceed male wage rates for jobs in the same industry. In the remaining 68 occupations, male wage rates were higher. In 29 occupations, the disparity between female and male rates had actually increased over the previous year.

Disparities in earnings exist at all levels of education. Salary benefits from education are lower for women

than for men at all levels. Female graduates' median salaries in 1978 were about 85 per cent that of the males, and the median salary for a woman with a bachelor's degree and no previous experience was \$13,090, less than the \$13,270 median salary for a man with a one-year college diploma and no experience, according to a study by the Women's Bureau, Labour Canada (Devereaux and Rechnitzer, 1980).

Jane Gaskell, in her work on education and job opportunities for women (1980), indicated that the gap between male and female earnings widens for every year of education they complete. Training in the science field yields the highest salaries but has the greatest wage gaps between men and women. Gaskell also noted that women usually work in occupations which require education as a prerequisite, so that there is less employer investment in women's education and training.

Prospects for the future are not highly promising, because few women are in training programs in non-traditional areas and attitudinal studies of girls and young women reveal that a large number plan careers along traditional lines or do not plan careers at all. Although this is often interpreted as a matter of personal choice, a major reason for these attitudes and training choices is that women lack exposure to the idea of entering many occupations and few guidance counsellors provide encouragement to women to enter non-traditional fields. Those in the vanguard of entry in some fields are frequently subject to harassment and pressures making it difficult for them to succeed. Educational materials, media messages and the biases of parents, teachers and counsellors generally reinforce traditional views. In addition, there are concrete barriers to entry into certain fields in the form of unnecessary screening devices and recruitment systems that eliminate female applicants.

Many women have had to adjust their labour market commitments to accommodate family responsibilities by dropping out of the work force for significant periods, by taking part-time work and jobs with no overtime demands. These decisions often involve serious penalties in terms of career progress and future earnings, a particularly serious problem for women who may later have to become solely self-supporting. Women also generally have the responsibility for finding substitute care for their children when they enter the labour force. The double burden of family and work responsibilities often provides significant barriers to women entering or re-entering the labour force.

While day care and the special problems of re-entry women are very important issues, there is a growing awareness of the dual difficulties of women who are poor, disabled or over fifty. These women, as well as

immigrant and Native women, can suffer double discrimination when they seek training or employment.

The changing composition of the labour force and changing structure of labour demand both point to the need for change in the pattern of female participation in the labour market. It is the Task Force's view that the economy can no longer afford to overlook the full potential of the female labour force. Those women with mechanical, scientific and technical ability should be encouraged to consider non-traditional occupations in business, industry and construction. Programs and policies should be aimed at assisting women generally to fill a wider range of jobs and at removing barriers to their entry and advancement. Government training policies should cease to stream women into secretarial/clerical courses which prepare them for occupations which are declining due to technological change, and encourage women to develop skills in occupations with growing demand. As a society, it is important that we ensure that opportunities are available to women to recapture lost labour force experience so that they do not suffer excessive economic penalties from child-rearing responsibilities. The importance of flexible organization of work for women to maintain and develop their skills throughout child-rearing years, short flexible training courses designed to update skills, accompanied by support for child-care programs cannot be over-emphasized.

People of Native Ancestry

There is a growing resolve by Native people to improve their standard of living to levels generally enjoyed by non-Native people and to do so in a way and on terms that reflect Native values and aspirations. Native people are no longer able to provide for their needs through traditional economic activities. Many are moving off the land into settlements, towns and major urban centres in search of employment, economic opportunities and improved future prospects. Many local Native economies are being placed at risk by the sudden and pervasive emergence of nearby resource development projects. The choice facing Native people is to find some accommodation with the majority culture and modern industrial economy either by migrating to larger urban centres, by striking some agreement with resource development enterprises, by developing a local Native economy or by some combination of all three responses.

Exacerbation of existing problems is suggested by demographic trends. The Native "baby boom" of the 1950s and 1960s will increase the working-age population by approximately 200,000 in the 1980s. In the western provinces, Native people will account for 20 per cent of labour force growth. These young people face a

declining traditional economy around Native communities and lack the skills and education to compete successfully in the already youth-saturated wage economy. Also the increased number of single parents supporting families presents a serious dilemma for policymakers.

Development of these policies is further complicated by the jurisdictional divisions that exist for Status Indians, Métis and Non-Status Indians, and Inuit. Although the labour market position of Native peoples is examined geographically for the purposes of this Report, we recognize that policy will be made more complex by the efforts of the different jurisdictions that influence its development. Although employment difficulties facing Native people in the western provinces are highlighted, the Task Force emphasizes that the severity of such difficulties elsewhere in Canada cannot be minimized.

CEIC's Task Force on Manpower Services to Native People, established in 1974, and the subsequent development of a Native employment policy, resulted in increased availability of CEIC's services to Native peoples. Although we recognize that these initiatives resulted in some progress, it is the Task Force's view that changed labour market conditions and the growth of the Native working-age population will require that more aggressive labour market policies be directed to improving the employment situation of Native people. Because the economic conditions in the 1980s are right, we believe that they can make greater gains in their economic position now than in the past.

Urban Centres. Lack of opportunity within Native communities has led to substantial migration off reserves and into cities. Migration has stabilized in Ontario but continues to grow in the prairie and western provinces, where approximately 40 per cent of the Native population lives in urban centres.

To gain a detailed knowledge of the problems of Native people in cities, the Task Force commissioned a study by Stewart Clatworthy of the Native population in Winnipeg. This study showed a population structure considerably younger than the general population, with substantially lower education and occupational skills. A surprisingly high number of families, approximately 44 per cent, were headed by single parents, most of them women.

The study confirmed previous findings in revealing a pattern of low-skill/low-wage occupations, and of barriers to mobility to more desirable jobs, frequent and lengthy unemployment, very low incomes and heavy dependence on social assistance. The problems were

most acute among young Status Indian males and among women of Status, Métis and Non-Status Indian groups. The Native unemployment rate currently exceeds 30 per cent and the average length of each period of unemployment is quite long—over seven months. Participation rates are significantly lower than those of the general population — 25 per cent fewer working-age men and 40 per cent fewer women are in the labour force. Employment is concentrated in construction, manufacturing and processing and service industries and in the lowest-skill/lowest-wage occupations. Occupational mobility appears to be largely non-existent or very slow.

The Clatworthy study finds that:

In general, the employment and income disparities identified in this report are sufficiently large to warrant the consideration of special policies and programs to address the needs and problems of the urban Native population. The need for special attention appears particularly great at the point of program design in that the Native population is characterized by radically different demographic composition, education and skill levels, and employment experiences. These characteristics of the population translate directly into different types of needs and different capacities to function within traditional employment environments. Of particular concern in this regard are Native single parents, a group which accounts for nearly one-half of all Native household heads. (p. 63)

These findings have important implications for current programs and policies. The majority of existing employment and social support programs available to Native migrants were designed to address the needs of the general population. Although no systematic research appears to exist directly comparing the needs or adjustment experiences of Native and non-Native urban residents, research undertaken by Clatworthy strongly suggests that past and current programming efforts are not leading to successful adjustment of Native people to urban life. Clearly the issue of special, comprehensive programming designed to meet the unique needs of Native migrants should be given careful consideration.

We suggest that such programs should be heavily geared to meeting the needs of young adults and women. The preponderance of single parents, many of them with large families, points up some specific social support needs, including expansion of day care. One dilemma is that social assistance payments for large families exceed employment earnings at the minimum wage level. Because Native families are often large, this presently acts as a disincentive to employment and encourages continued dependence.

Improvement of formal education and occupational skills clearly has had positive effects on the labour force performance of many urban Native people. Yet evidence from the Winnipeg study indicates that the exception is Status Indian women, a group whose labour force position suggests that those with higher education (11 or more years) suffer greater employment barriers than those with less education. The evidence suggests that although education, training and skill development should be emphasized because of its positive relation to employment, for a large number of Status Indian women it produces no rewards. Further examination of the employment situation of this group is required to determine the barriers which prevent them from realizing gains from education. Since a large proportion of this group have taken the adult upgrading courses, the study suggests that some of these barriers may stem from the quality of the education/training system itself.

Results of the Clatworthy study suggest that the urban Native population is locked into a pattern of low-skill, low-wage and unstable employment. It is the view of the Task Force that labour market policies and programs should be designed to break this pattern in order to improve the overall economic well-being of Canada's urban Native population. To attack employment barriers and enhance mobility, aggressive application of progressive employment practices and adjustment programming will be required.

Resource Development. While major resource developments are projected throughout the country during the 1980s, the majority of large-scale projects will be located in hinterland areas of the western provinces and the Northwest Territories. It is estimated that economic growth and development in Canada's West, partly as a result of major resource projects, will generate from 560,000 to 700,000 new jobs over the next decade.

Since fully 60 per cent of the total Native population resides in western Canada, improvement in the Native employment situation could be achieved by absorption of the Native labour force in the West. Despite this obvious potential for an improvement in the labour market position of western Native people, studies have concluded that in spite of forecast labour shortages, projections to 1985 offer little prospect of increased Native employment unless there is intensive programming effort.

Furthermore, evidence was accumulated during the 1970s which demonstrated that the impact and extent of major resource development placed considerable stress on adjacent Native communities. One of the major

impacts, erosion of traditional sources of sustenance and income, has not been compensated for by economic opportunities from industrialization of hinterland areas. Native gains in terms of direct employment or spin-off benefits have not been significant. Generally, Native people have only been able to obtain low-skill jobs for fairly short periods, and Native communities have derived few overall economic benefits from nearby resource developments.

Until recently, the majority of resource developers have not acknowledged the necessity of special measures to promote Native interests. However, over the last few years there has been some progress, and a number of corporations have developed action plans to respond to special needs of Native people as well as other disadvantaged groups. Although progressive employment practices have been more or less voluntarily adopted by resource developers in recent years, there is little doubt that the possibility of compliance legislation has been an incentive to corporations to cooperate with government in advancing the labour market position of Native people. The projects that have achieved the best record of success have been those in which private sector employers, Native communities and government all were involved.

In addition to the requirement for such tripartite involvement, a review of current major development initiatives in rural and remote areas highlights the benefits of a formal, detailed agreement between government, Native people and developers, drawn up before the planning process commences. Another key factor which emerges from research on promotion of Native interests is the necessity for stable longer-term commitments and allocation of resources, as human development and community development are processes which require a comprehensive approach for a considerable time before results are visible.

It is the Task Force's view that business development support should be increasingly used to advance Native interests, as spin-off activities generated by major resource development offer new local business opportunities which can create considerable Native employment in a rural or remote area. The technical expertise and financial support of developers and government should be made available to Native groups on a stable basis to develop Native enterprises. Where local Native business exists, developers' action plans should include contracting with these enterprises. These approaches are developed further in Chapter Eight.

Local Economic Development. Notwithstanding improvements in transportation linkages over the last few years and increased access to remote regions

through resource development projects, many Native people still remain fairly isolated from labour and commodity markets. A large proportion of Native communities are still accessible only by air or water. Native communities are predominantly located in a socioeconomic belt characterized by high unemployment, and the proportion of Native people living in high unemployment areas is more than double that of the national population.

Difficulties in finding employment are reflected in the increases in migration off reserves by Status Indians, the proportion of Métis and Non-Status Indians living in metropolitan areas, and the magnitude of social assistance expenditures to rural and remote Native communities.

Federal and provincial expenditures for assistance to Native groups is almost entirely concentrated in meeting immediate needs, largely related to chronic unemployment and underemployment. Very limited funding is left for attacking the underlying causes of these problems. The National Indian Brotherhood (1981) estimates that 95 per cent of federal and provincial expenditures for Status Indians consists of services and only 5 per cent is developmental. With a large and growing Indian population needing remedial services, developmental programs are more easily dropped or reduced. The NIB recommends that "to address the problems seriously and effectively requires that current allocations for 'survival type' programs continue, and that an additional significant injection of capital be made available for economic development and job creation" (p.12).

Some progress has been made in recent years, particularly in western Canada, as a result of Indian Band revenues from petroleum extraction and exploration. These funds provide a source of capital for Native business, although there are constraints imposed by the lack of appropriate mechanisms for funnelling such capital into viable economic activities. Non-Status Indians, Métis and bands without non-renewable resource revenue are even further limited by the lack of capital in addition to the lack of business expertise and economic growth possibilities.

When land claims have been settled and Native development corporations have been established, northern Natives can be an effective economic force. Large amounts of capital will become available, allowing opportunities for investment and participation in the mainstream economy as well as developing the local Native economies to reflect their environmental and cultural needs. Whether the impact of land claims settlements is a positive challenge or a lost opportunity depends largely on the support, planning and infrastruc-

ture development which take place over the next few crucial years. The Task Force emphasizes that those corporations already established — Makivik Corporation (Northern Quebec Inuit), the James Bay Cree Regional Authority, and the Inuit Development Corporation — must be supported in their development initiatives. There is much to be learned from their progress by other Native communities.

It is the Task Force's view that long-term support for community economic development is necessary for the development of Native groups. In a major sense, this is the key to Native economic self-sufficiency. Community development initiatives, technical support and access to capital financing are essential to assist and support Native peoples to share in Canada's economic growth and development. While short-term employment development programs continue to be necessary, they should be designed to further long-term development goals, as discussed in Chapter Eight.

The economic conditions of the 1980s will provide the opportunity for Native people to realize their economic goals. Not only is it necessary that they have an equitable share in the economic developments of the 1980s, but we suggest that Canada's growth will be constrained if Native peoples do not realize their full economic potential either by participating in the industrial economy or by developing their local economies in keeping with their values and aspirations.

Disabled Persons

Because of the work of the Special Committee on the Disabled and the Handicapped (1981), the Task Force was able to draw on information submitted to them and on their findings related to employment concerns.

According to the Department of Health and Welfare, 1,345,000 Canadians of working age have physically or mentally disabling conditions. Of this group, 1,035,000 are partially disabled and able to perform a major activity. National voluntary agencies estimate that 50 per cent of these, approximately 500,000, are employable and that unemployment rates run as high as 85 per cent.

It is essential to point out that the range of problems faced by disabled persons in the labour market is greater than for any other target group. There are, first of all, the limitations imposed by social perceptions about disabled people and their abilities to work. Secondly, there are systemic barriers in the form of unnecessary physical requirements and failure to make accommodations in the workplace to compensate for disability. Thirdly, there are limitations in training, education and aspira-

tions of disabled persons who have been discouraged from developing their abilities and seeking full participation in the work force. Finally, there are actual limitations in the ability to perform certain types of work — intellectual limitations for mentally retarded persons, sensory limitations for blind or deaf people, physical limitations for others — yet many of these limitations can be overcome by the use of technical aids or reasonable accommodation to the workplace.

Although there is no adequate pool of data, assumptions based on the work of organizations that deal with disabled people indicate that they are severely unemployed, underemployed and are generally in low-income jobs.

In the absence of a clearer specification of the disabled labour force and its characteristics, analysis of the labour market needs of disabled people has been based on information submitted by voluntary agencies to the Special Committee on the Disabled and the Handicapped. The voluntary sector plays a more important role in the affairs of disabled people in Canada than it does for any other disadvantaged group. Where the activities of organizations for disabled people have touched on employment development concerns, their observations are therefore of great utility. The chief limitation is that these organizations usually do not specify how many disabled persons they serve and at what level of difficulty. Priorities for action are therefore difficult to determine except in very general terms.

Because policy and program development are so seriously hampered by lack of data, the Task Force emphasizes that high priority should be given to the development of a long-term strategy which will generate comprehensive data on disabled persons. Until such time as data can be generated through the 1986 Census, the *Labour Force Survey* and other population-based surveys should be used to provide appropriate socioeconomic data on the disabled. Further, since employment is a key issue in the improvement of the socioeconomic position of disabled persons, the Task Force suggests that it is appropriate that CEIC take the lead in developing a body of socioeconomic research to provide a basis for policies and programs to effectively utilize these people in the labour force. Because disabled women often face different and greater barriers to employment, all research and statistical analyses should be broken down by sex.

In their 1977 study of vocational rehabilitation in the United States, Sar Levitan and Robert Taggart note the central handicap disabled people face in the labour market:

Employer surveys evidence a general reluctance to hire the disabled when non-disabled workers are available. Many employers believe that there are higher costs, such as increased worker's compensation expenses or inflated medical and life insurance premiums. Although most believe that the disabled will be more reliable, they fear involuntary absenteeism and turnover. Another consideration is the lack of flexibility in job assignments and the difficulty of promoting. (p. 8)

This reluctance has significant effects on the employment of disabled people, as indicated by their estimated unemployment rates. It is also reflected in the general lack of architectural arrangements, in the unavailability of modified work schedules or equipment to assist the disabled and in the general absence of company policies governing recruitment of disabled workers.

This situation is further compounded by the fact that the disabled population is likely to have a lower education/training profile than the non-disabled population since a substantial proportion of impairments are present early in life and opportunities for training and education are limited. Yet large numbers of disabled people are fully able to enter the labour force, with their disability compensated for by technical aids or reasonable accommodation to the workplace, frequently at minimal cost to the employer. The greatest obstacle to employment of disabled people stems from society's perception of their abilities in training and in work.

Several initiatives that bear directly on the recruitment of disabled workers are already in place, e.g., wage subsidies, training allowances. However, many voluntary agencies point out that such programs need amplification in terms of coverage and funding as well as approaches used. Areas in which incentive programs might help to stimulate recruitment of disabled workers include assisting employers in doing architectural modifications, acquiring technical aids for use by the disabled, providing in-house training for non-disabled employees, planning work schedules and processes to maximize the output of disabled workers and providing on-the-job training tailored to their needs.

Voluntary agencies emphasize that adoption of building codes and municipal regulations would guarantee accessibility of the physical environment to the disabled, and that progressive employment practices in both the public and private sector with mechanisms to ensure compliance would be a necessary adjunct to this thrust.

In some industries work modules that can be adapted to any location can be developed and made available to the disabled at home or in sheltered work environments. This appears to be possible in the computer and elec-

tronics industries where communication between plant and worker can be maintained through electronics and telephone hookup.

For those whose productivity cannot be brought up to normal levels with specific aids, a sheltered work environment has been used to provide employment. Although opinion is divided on this method, it may be considered as a "halfway house" for training/rehabilitation prior to integration into the general work force and a permanent work area for persons with severely limited work capacity. In either case, the linkage of this system into the general economy is critical in our view.

It is the Task Force's view that employers will not adjust their preference for non-disabled workers without some initiative from government. The Report of the Committee on the Disabled and the Handicapped (1981) states:

The solutions to many other problems faced by disabled persons can only be achieved when more jobs are provided. The Federal Government must make this the highest priority of all policies and programs for disabled persons, and take whatever action is needed to begin removing the obstacles which prevent employment.

The Task Force supports this view and urges that policies and programs designed to improve the employment situation of disabled people be implemented with all possible speed.

Youth

Young people (age 15-24) accounted for 26.3 per cent of the labour force growth in 1976-79, with peak youth employment and unemployment rates occurring in 1977-78. Because of the large numbers of young people entering the labour force and the rise of relative youth unemployment rates since 1967, the absorption of youth into the labour force has been a subject of policy and program concern over the past decade.

Youth unemployment rates have been consistently higher than those of adult workers in recent years (13.2 per cent compared to 5.4 per cent for adult workers in 1980). The unemployment rate for young women (12.7 per cent) has been generally lower than that of young men (13.8 per cent) although young women, once unemployed, are more likely to experience joblessness of long duration.

In the 1980s the proportion of youth entering the labour force is expected to decline although the youth labour force will remain numerically stable until 1985. In the latter part of the decade, the absorption of youth will be generally less problematic because of the decline

in the proportion of inexperienced people entering the labour force. Nevertheless, a portion of the youth population, as of the population as a whole, will continue to require special programming efforts because of severe employment problems.

A report on *Youth in the Labour Force* (Dept. of Employment and Immigration, April 1980) found that less than 10 per cent of the youths surveyed accounted for over half the total months of unemployment of the entire group. These severely unemployed youths had worked for less than half their time in the labour force. A high proportion of the severely unemployed youth had little education, lived in high unemployment regions, and had a difficult time getting the first job. They were also more likely to be female than male and teenage girls rather than women in their early twenties.

The study stresses the importance of the "entry process" in that those who experienced unfavourable early labour market experiences were less likely than other youths to achieve success later on. Education was the most important factor for success and graduation from high school was critical to subsequent employment.

Pre-entry preparation provided a high return on investment for young people. Part-time and/or summer employment often led to full-time out-of-school employment, and employment experience while still a student was positively related to later full-time employment. This suggests that comprehensive services for the dissemination of labour market information in schools can be an important resource for assisting youth to select, whenever possible, an appropriate first job.

The occupations that young men and women entered followed traditional sex-stereotyped lines. Further, women received significantly lower average salaries than men. This points to the need to train young women for a broad range of occupations in growth industries to break the pattern of occupational segregation and increase their opportunities for advancement and higher wages.

The Task Force considers that the findings on early labour market experience and the transition from school to work indicate that more policy emphasis should be placed on easing this transition for youth in general, and that targeted programming efforts should be aimed at severely unemployed youth to assist them in establishing positive employment patterns for their work life. Cooperative education and job experience training, discussed in Chapter Nine, are useful models to aid in this process.

We emphasize that these programs will be particularly important to the large numbers of Native youth entering the labour force, many lacking the credentials and experience necessary to succeed in the labour market.

While the transition from school to work will remain an important factor, and we expect that some young people will have difficulty with this process, nevertheless, as we move into the 1980s, the youth population will represent a smaller cohort than in the past. Because of this it is important that young people be directed into high demand occupations.

Older Workers

Although the unemployment rate for older workers is lower than for the work force as a whole, the economic and social hardships of those who experience unemployment tends to be more severe.

Workers 45 years and over who become unemployed through business failure or layoffs resulting from plant closures often face long spells of unemployment and discouragement and may withdraw from the labour force. They are at a competitive disadvantage in seeking new jobs because of generally weaker educational backgrounds, experience in occupations in declining industries, limited opportunities for retraining, employer preferences for younger workers, and low geographic and occupational mobility.

Women over 40 re-entering the labour force encounter access barriers because their skills and education may not match present job requirements. In addition, they often lack confidence and job search skills. Their experience gained outside of the traditional labour force is rarely recognized.

It is the Task Force's view that emphasis should be placed on adjustment policies which will aid older workers, both male and female, to re-enter productive employment. Wage subsidies to overcome employer resistance and short training packages to update skills can aid this group.

Although unemployment is a problem for a segment of the older working population, this group as a whole is highly valued, possessing skills and experience which will be difficult to replace as workers reach retirement age. Participation rates reveal some changing patterns. Most women are maintaining their attachment to the labour force throughout their working-age lives. This growth is partly offset by the increase in labour force withdrawal of older male workers, particularly those 55 and over. In all, participation rates for those age 45-65 are expected to increase only marginally over the next 10 years, but declining population growth and shifts in age structures are projected to raise their share of the working-age population to about 38 per cent. In addition, there is a gradual increase in longevity and a slowdown in functional aging, which could create pres-

sure for workers without adequate pensions to seek to remain in the labour force and for others with higher pensions to withdraw early or change employment activity.

There emerges a pattern of an increasing pool of older persons fully capable of continuing their attachment to the labour force at a time when serious industrial adjustment can be expected to require the skills they have developed. Recent studies of the situation of higher skill workers in construction and manufacturing and of tool and die makers in Ontario indicate that future critical shortages in these areas are tied in part to the marked aging of this work force.

These findings suggest that the management of labour shortages in some highly skilled trades in the next decade will require employment strategies that either slow the withdrawal of older workers from areas of highest productivity and growth in the economy or prevent the total loss of such vital skills and expertise in the post-retirement period. Removal of mandatory retirement legislation and adoption of policies to encourage flexible work arrangements can facilitate employment for older workers. In addition, we suggest that the experience of skilled older workers should be utilized as fully as possible in training programs.

Implications for Policy

As we have already noted, the largest source of labour force growth in the 1980s will be the increased participation of adult women and attainment of labour force age of the Native "baby boom." As with the influx of youth in the 1960s and 1970s, these groups are much greater in numbers than would normally be absorbed given current employment practices and current relative wages. At the same time, the labour force is growing more slowly and, as noted in Chapter Four, some occupations, regions and industries will experience significant labour shortages.

The Task Force has considered a number of options to deal with the absorption of these groups of people into productive employment and at the same time to increase overall output.

One option would be to do nothing and to rely solely on the normal operation of the labour market to bring about the required adjustment. Labour demand will naturally absorb some of these people but will almost certainly not absorb them in the numbers required or ensure their productive employment, so that unemployment rates for these groups will rise. Consequently, their relative wages will tend to decline, inducing some growth in their employment. But changes in relative

wages take place slowly, so we can expect a slow rate of absorption into the labour market and an exacerbation of social problems. Native people, particularly in western cities, are bound to become increasingly frustrated by their high rate of unemployment in the midst of relatively high rates of economic growth in their region. One consequence which must be anticipated in these circumstances is the formation of urban ghettos with their attendant social problems, including alienation from the labour force. Adult women will continue to be underutilized and remain occupationally segregated in low-wage jobs. This situation will conflict with human rights legislation and the principle of equal pay for work of equal value. For all these reasons, opting for no intervention in the labour market to accommodate target groups will result in low productivity, slow growth and increased pressure on male wages and wages in western Canada. This would be a costly solution.

A second option would be to use direct employment programs for these groups, as we did with youth in the late 1960s and 1970s. However, our experience has shown that this approach does little to facilitate adjustment and does not increase productivity. It will not expand the supply of labour in high-demand occupations and industries which is needed to contain the pressures of wage inflation.

A third option would be to use market mechanisms supplemented by voluntary affirmative action measures to encourage firms to hire more target group members. However, we have found no evidence that a voluntary system significantly hastens the absorption of these groups. To the extent that there are initial costs, particularly when measures are not instituted throughout an industry, it does not pay firms to be leaders. As with the non-intervention option, the main adjustment mechanism will still be higher unemployment rates and lower relative wages, and the same problems will be encountered and will be especially severe for Native people in western cities and for adult women.

A fourth option would be to use supply-side mechanisms to improve and upgrade the quality of the Native and adult female labour force. Although this is possibly a necessary condition for their absorption, it is by no means a sufficient condition, for there is no guarantee that demand will emerge automatically for this labour. For example, research in Winnipeg has shown that better educated Native women are absorbed more slowly into employment than are less educated ones.

To overcome this problem, we have come to the conclusion that some form of legislated action may be required to ensure that employers adopt employment practices which make better use of this expanding

supply of target group labour. Because of the complexity of the causes of exclusion and underutilization, the internal diversity of the target groups and the key significance of these groups to economic growth, a complex, integrated approach is required. This approach would consist of an appropriate mix of several instruments, each of which is designed to address a specific part of the absorption problem. The instruments which would be contained in this package are: improved market information, enriched counselling, employment support measures, training, wage subsidies, employment development measures, flexible arrangements of work and legislated measures to ensure that employers adopt employment practices which encourage the hiring and promotion of target group members.

An integrated approach means more than ensuring that target group needs receive greater emphasis. It also means developing policies which break down the barriers on the demand side, encourage better skill development on the supply side and respond to the requirement for appropriate market mechanisms to support these initiatives. While these three broad policy areas are closely interrelated, it is useful to regard them as separate areas for policy development.

The policy implications associated with providing access to the labour market for target group members can be examined in terms of entry to employment and progression to higher levels of skill. For some individuals, entry and re-entry to employment is the greatest problem, their greatest immediate problem being the inability to gain or maintain access to productive employment. For others, the main problem stems from barriers within firms which prevent them from advancing to positions of greater responsibility. In recommending appropriate policies to deal with demand barriers, supply requirements and market mechanisms, therefore, it will be necessary to ensure that they not only facilitate access but promote the advancement of qualified target group members to all levels of employment.

Market Mechanisms

Together with broad policy initiatives designed to improve labour market demand for target groups and to develop the skills in line with this demand, policies must be able to facilitate the rational operation of the market with various integrative mechanisms. These policies may be best outlined in terms of those which expedite target group movement into the labour market and those required to ensure that programs directed at the development of skills are accessed by women, Native people, disabled people, youths and older workers.

It is the view of the Task Force that an increase in demand for target group workers requires three basic

services. Employers will be seeking designated referrals of target group workers with required skills able to enter wage subsidy programs and human resource plans incorporating progressive employment practices. Counselling services should be supplied to target group members for career planning and for adjustment and support assistance. Identification of suitable training and the provision of incentives and resources for on-the-job training will also be required.

Job Information and Counselling. Ensuring a supply of target group members to meet future labour market demands will require adjustments to the current channels of information. The needs of the large numbers of people seeking employment who are “job-ready and market-wise” —with sufficient knowledge of the type of jobs they seek and with the qualifications required — can be met through the provision of extensive computerized job information, as described in Chapter Five.

Although some members of target groups are served by this system, a disproportionate number of women, Native people and disabled people are excluded from full participation in employment because they lack access to traditional channels of information and require additional counselling and support services to obtain and maintain employment.

We emphasize that co-ordination with the universal information and placement programs is essential but will require increased sensitization of those responsible for delivery of counselling. Employment counsellors and others have contributed to the screening-out process in the past because their assumptions and advice about suitability of certain kinds and levels of work have often followed traditional patterns. We believe that the development of a more intensive counselling capability, as described in Chapter Five, combined with the use of community resources will help remedy this problem.

The Task Force recommends that a specialized counselling unit for target group members be used to provide enriched employment services sensitive to the requirements of these people. Highly skilled counsellors, knowledgeable about the special needs of target group members, about labour market trends and the range of employment services available to clients, will be crucial to its success. This special counselling unit may function as a satellite to the regular services but it must be closely linked to the community it serves and at the same time have direct access to the employment system. The recently established Women’s Employment Project in Vancouver combines these elements and may, following evaluation, provide one model for delivery of these services in metropolitan areas or where the target group population warrants. In other areas, a special counsel-

ling unit may be located as a satellite unit within a Canada Employment Centre to ensure its access to the employment system. Specialized counselling units must provide a range of services including specialized pre- and post-employment counselling, direction to appropriate training, and marketing of clients to employers.

Experience with the Outreach Program indicates that it has been successful in reaching clients who have been unable to utilize the regular employment system. Delivered by the community, it has been sensitive to target group needs and has had access to community resources. However, it has suffered from a lack of assurance of ongoing funding and, in many cases, from insufficient access to the resources of the regular employment system, thereby remaining at the margin of the employment service. Because the Outreach Program can provide service for individuals who have difficulty gaining access to the regular system and who require enriched employment support services to successfully enter the labour force, the Task Force believes that it should continue to be delivered by the community it serves. As a community-operated program, it can gain access to a broader spectrum of resources from the community and from various levels of government, in addition to those of CEIC. The program must, however, be assured continuity of funding and have a formal route of access to the employment system. The combined use of special counselling units and Outreach Programs will have a major impact on the success of deep wage subsidy programs, progressive employment practices and both institutional and on-the-job training of target group members.

Employment Support. The experience of exclusion from the labour market in the past means that some target group members will encounter adjustment problems until they have gained experience in employment. Some of these adjustment problems will be directly related to the workplace and others will stem from the position of the individual in society. To ensure the successful adaptation of these individuals to the labour force and to ensure the effectiveness of demand and training measures, a range of employment support measures will be required.

Post-employment counselling can aid workers in adjusting to the workplace, identify training needs, and assist workers to gain access to such community support services as day care, alcohol counselling, housing, transportation, etc., which will allow them to succeed. These services may be delivered by the satellite counselling unit, by contract to a third party or by the employer. The experience of employers who have developed these programs is that they operate most successfully when separated from the regular personnel system.

Support must be provided for workers with family responsibilities. Since many workers, particularly women, incur economic penalties during early childrearing years, labour market policies cannot ignore family policy. The trend in some European countries toward the development of family "packages" goes far beyond any single policy strategy. The European experience clearly suggests the need for a policy strategy that includes income transfers, child care services, and employment policies as central elements. Policies encouraging maternity and parental leave without loss of seniority and flexible work arrangements for working parents with young children aid in reducing the penalties of lost wages, seniority and skill development. Support for child-care facilities established by employers, unions and community groups enable working parents, particularly women, to continue working or undertake training. A recent survey of such arrangements (Kamerman, 1980) observes:

Unless it becomes possible for adults to manage work and family life without undue strain for themselves and their children, society will suffer a significant productivity loss in the labour market and the economy, and perhaps an even more important loss in the quantity and quality of future generations. (p. 28)

Since family responsibilities affect the ability of all workers to participate fully in productive employment, these matters require fuller study than could be dealt with under the mandate of the Task Force. We therefore recommend that such a study be undertaken with a view to early development of a comprehensive plan.

Urban adjustment assistance for Native people is needed. As discussed earlier, research has shown that large numbers of Native people in urban centres are experiencing employment and adjustment problems. The Task Force believes that support to Native Friendship Centres or similar institutions to provide assistance and access to community services such as housing, health care, employment, child care and other services would better facilitate the adjustment to urban life and work.

We urge that employers should be given assistance to modify the workplace by providing technical aids, architectural modification and redesign of jobs to assist the employment of disabled workers. This should be accompanied by modification of training skill packages and training facilities to support training initiatives. Training is of key importance for developing the skills of target group members. On-the-job training in particular will be an important tool for integrating those who lack

the specific skills required by an employer. This may require the simultaneous delivery of integrated counselling and support services.

Information Strategies and Research. Employers have often complained that despite their wish to employ target groups, group members often lack the necessary skills to do the job. CEC counsellors and referral officers in turn argue that certain groups, particularly women and Native people, are not interested or do not apply for training or for referral to non-traditional occupations. Sometimes objections to "interfering" with an individual's employment or career choice are raised. There is some evidence that expectations are changing. For example, three recent attitude surveys of female high school students in Ontario found a marked shift in job orientation toward the hard sciences and senior managerial occupations among girls in upper income families. But orientation towards traditional female work remains strong among other young women. Given existing trends, it is expected that over 50 per cent of women entering the work force over the next decade will continue seeking and equipping themselves for employment in clerical, sales and service occupations.

Part of the reason for this continuing pattern lies in attitudinal structures fostered by society's expectations. Despite some noticeable changes, traditional assumptions about the role of the sexes have heavily influenced the educational and employment aspirations, opportunities and attainments of women.

This raises the very important question of what programs designed to change expectations are suitable for CEIC. Failure to address this policy requirement will significantly impact not only on the success of progressive employment practices but also on the demand to utilize the non-traditional skill training opportunities created for target groups. It is our view that a significant impact on demand can be made by improving the type and amount of information available to these groups. It is quite probable that the outcome of attitudinal studies and career/training decisions are in large part a function of the information on which choices are based. It is incumbent upon the CEIC, therefore, to ensure that women, Native people, the disabled, youths and older workers are provided with accurate assessments of trends in employment, with complete information communicated to counsellors, to parents and to opinion leaders.

We would recommend that for each target group, the Commission develop a strong, integrated information strategy to ensure effective marketing, recruitment and career counselling related to CEIC-sponsored skill training. This should also be supported by a well-funded job

experience program for Native students and a substantial non-traditional job experience program for female students.

Finally, because we have recommended an expanded role for community-based groups in supplying various support services, it is essential that these groups have a strong understanding of the labour market and how it operates. Included in the information strategy, therefore, should be a program designed to facilitate this understanding. This would include not only grants for research but also mechanisms for working with relevant CEIC staff and other organizations capable of facilitating the groups' knowledge of the labour market. Such a program would have a strong, positive impact on the capability of the groups to participate effectively in the labour market.

Ensuring a Supply of Target Group Workers

Training. Policies aimed at removing barriers in the labour market must be accompanied by policies to improve labour market supply. Because deficiencies in skills and education are significant and legitimate barriers to successful employment, training programs must continue to develop target group workers both for entry to employment and promotion to higher levels of skill. Special allocations of training funds targeted to the groups and their levels of skill should be assured and programs should be sensitive to the needs of target groups members.

Although emphasis has been placed on providing training programs for target group workers, the current mix of programs has not met with the desired result. Individuals with a pattern of low income, unstable employment or failure to adapt to employment at all have often been unsuccessful in long-term formal training programs. The key to a successful approach appears to be the combination of employment with a package of multidimensional training and support services.

For those people who have been unable to obtain jobs at the entry level, or who have a history of unstable work, the training programs that have been most successful in providing the bridge to stable employment have been directly linked to jobs, with training aimed at skill deficiency and work adjustment. In other words, the best training for a job is a job.

The early success of programs such as those of AMOK, Syncrude and NORTRAN in the private sector; and Manitoba's New Careers and semestering, Ontario's generic skills and Nova Scotia's concurrent program in the public sector; suggest that these job-based training models can be used for members of target

groups who experience difficulty entering the labour force. These programs vary with the region, the industry and the target groups they have been designed to employ and train. However, they all contain the following elements:

- training specific to the job;
- long-term commitments to training/employment with substantial backup services such as post-employment counselling, day care, etc.;
- design and monitoring done by a third party outside the regular personnel systems.

This type of training/employment program has been used to integrate Native peoples, disadvantaged youth and women in urban, rural/remote and northern regions.

Because the Clatworthy study and others conclude that education and training have had positive effects on the labour force position of many Native people, it is the Task Force's view that training initiatives for Native people generally should be increased. However, the position of Native women requires special attention. The acuteness of their labour force problems requires that further investigation be made into the nature of the barriers which prevent them from realizing gains from education, and that the necessary steps be taken to remove them.

The Task Force concludes that training directed at underdeveloped areas and people should be designed as outgrowths of community economic development approaches, with the people participating in its planning and implementation. These people may be unwilling or unable to fit into traditional educational institutions and thus may require more flexible, less formal and more locally based instruments. Recent experience is largely positive where people have hired their own instructors, outlined their own course needs and where such undertakings have connected into upcoming or existing job opportunities. The concept of a resource package for the provision of economic development, training and other support measures should be developed. The development of the capacity for managing local enterprise, local government and infrastructure will be particularly important in Native communities. This is discussed further in Chapter Eight.

To ensure that members of target groups have opportunities to obtain jobs in growth industries and to advance through the employment system, the Task Force recommends that training initiatives should support the career development aspects of progressive employment practices. Incentives to employers to provide training at higher levels of skill, either on the job or

in institutions, are necessary to achieve target group participation in a broad range of occupations and occupational levels.

To encourage this process, we recommend that special allocations of training funds be made available for target groups in both industrial and apprenticeship training. These special allocations should provide for educational leave support as well as on-the-job training, so that target group members develop the skills to make them eligible for promotion within the firm. Assistance in career planning and goal-setting techniques should also be provided.

The introduction of microtechnology into the workplace — both in manufacturing and in the office — adds a critical dimension to the skills and training situation. It is apparent that new technology will change many jobs and will create new jobs with other skill requirements, but the kind of skills and training needed to upgrade both new and existing workers into changing skill configurations is uncertain (Menzies, 1980).

This problem is particularly acute in relation to clerical workers in those occupations where there is high turnover. With the application of microelectronics, those seeking to re-enter may find that their training and education does not enable them to take on many of the new highly skilled jobs that are becoming available. The great majority of these workers are women. The lack of concrete data on the impact of microelectronics on employment makes it imperative that government and industry monitor closely what is happening to jobs and develop a co-ordinated approach to the new technology in order to be able to cope with the employment impact.

Processes to develop channels of mobility within firms by providing “bridging” or training positions will open opportunities for target group members to move to higher skill, higher paying jobs. Although this is important generally, it will be particularly important in those firms experiencing rapid technological change. Progressive employment practices will assist firms to remove barriers in their internal labour markets which prevent target group members from advancing.

Because women have lacked exposure to the idea of entering trades and have received little encouragement from counsellors, employers or society, specific effort should be made to increase women’s participation in pre-trades and non-traditional training courses. To do this, the Task Force urges that courses be more widely available and be actively marketed to women. Further, because employers generally select industrial trainees, incentives to ensure a proportional selection of women in industrial and apprenticeship training will be required.

Similar measures are needed to encourage employers to train Native people at higher levels of skill.

Training programs should be made more flexible to meet the needs of disabled people and older workers. Retraining of older workers may include a partial or complete skill package and will comprise an increasing proportion of training requirements in this decade.

Training programs to move target group members into higher-skilled jobs and occupations in which they are presently under-represented are discussed more fully in Chapter Nine. It is important to emphasize here that these training programs should be not only available but actively marketed to target group members and employers, and that the necessary supports be incorporated into the programs to ensure success.

Influencing the Demand for Target Group Workers

The supply policies and market adjustment mechanisms described above can only be effective in the presence of adequate demand for target group workers. Hence, a key element will be the development of policies aimed at the removal of demand-side barriers.

Immediate attention should be given to systemic barriers which exclude qualified workers from jobs and promotions, and these efforts should be accompanied by programs to encourage participation of target groups in non-traditional occupations. Valid barriers based on the skill and experience requirements relating to safe and efficient job performance will be reduced more gradually through longer-range development of the requisite skills. Finally, community and regional economic development is the key to increasing employment opportunities for those target group members, particularly Native people, confined to areas that lack economic opportunity.

Wage Subsidies. It is the view of the Task Force that target group members who have difficulty gaining entry to stable employment can be helped most by measures which include actual work experience. Therefore, the primary emphasis should be to place people in productive employment.

Past experience has demonstrated that assisting individuals with severe employment problems through institutional training alone seldom enables them to move into stable employment. We have examined a number of recent programs undertaken by resource companies such as AMOK, Syncrude and Imperial Oil, in which trainees are placed in jobs, augmented by training designed for these jobs. Results to date are largely positive. While provincial and federal governments have been involved in these programs and have provided training funds, the firms have been strongly motivated

by the need to overcome the problems of recruiting and keeping workers in remote areas. By recruiting and training Native people already in the area, these companies are building a more stable and accessible work force for their needs. Chapter Eleven notes the importance of these innovations in relieving labour shortages and reducing turnover in remote areas.

The view of the Task Force is that the methods used in these programs have significant application for other target groups throughout Canada. Since the immediate inducements are less, there is greater need for government intervention. In the case of small firms, wage subsidies combined with training subsidies are probably the most powerful form of intervention. For large companies, mandatory progressive employment practices are likely to be of greater importance.

CEIC's recently established Wage Subsidy Program for the Employment Disadvantaged provides subsidies for employers to hire disabled people and workers experiencing long-term unemployment. We suggest that this program be expanded to include other target group members experiencing entry problems and that subsidies be available for up to two years, with actual length and degree of support being a function of the barriers faced by the individual workers. In addition, it should be closely linked to the training program.

To assist and persuade small employers to employ and train members of target groups and to provide the backup services necessary for their integration, a program of deep wage subsidies can be particularly useful. Moreover, the Task Force emphasizes that funds should be available to private sector employers developing progressive employment plans, to defray the short-run costs of modifying systems, increased supervisory and management time, training and supports, until the benefits of lower turnover and higher productivity are realized.

The Task Force urges that subsidies to encourage employers to move women into non-traditional occupations be expanded to cover a greater number of occupations and industries. Because of the great difficulty women face in breaking into male dominated occupations, greater success could be achieved by targeting the program to occupations where women have up to 30 per cent representation rather than dealing solely with those occupations which have been a solidly male domain. In addition, this program could provide expanded coverage if linked more closely to provincial initiatives.

Experience indicates that smaller employers are responsive to subsidy programs. Discussion with large employers indicate that subsidies alone are not sufficient to persuade some of them to employ target group mem-

bers, nor are subsidies necessary to persuade others to do so. Indeed, representatives of some large employers indicate that mandatory measures would be appropriate, provided that these measures are applied in an even-handed manner.

Affirmative Action—A Strategy for Progressive Employment Practices. The Task Force has identified a need to introduce measures designed to remove systemic barriers which exclude qualified workers from jobs and promotions and to remedy the impact of these barriers on the distribution and utilization of target group members. Government can play two different types of roles in support of the introduction of the required measures: encouraging voluntary compliance through such instruments as information dissemination, advocacy and wage subsidies, as well as setting an example in its own employment practices; and requiring employers to adopt "affirmative action" measures through legislation. To date the federal government has played only the first role.

The major advantage of using a mandatory program in Canada is that women and Native people would be utilized in those parts of the labour market where they are most needed, thereby increasing productivity, reducing the decline in relative wages and minimizing increases in the unemployment rates for these groups. In addition, such a program would reinforce the movement toward increased human resource planning and training in firms.

A number of potential disadvantages in using a mandatory approach have been identified by the Task Force. The first is the high legal costs that have been associated with the administration of some types of mandatory program. The second is the administrative cost of implementing manpower planning procedures when firms do not already have these in place. The third is the potential loss in competitiveness to firms which adopt employment practices which promote the hiring and advancement of target groups. Finally, there is the fear that a mandatory approach means the use of "quotas", with attendant costs and inefficiencies.

Our preliminary analysis indicates that these disadvantages were clearly present in some of the American experiences. However, analysis also indicates clearly that these costs arose largely because of particular design features of the early programs—features which are not necessary to achieve the goals of the program. The work undertaken for the Task Force indicates that a program can operate efficiently without resort to the use of quotas, and has indicated a number of possible approaches to implementation which would greatly reduce the potential for high legal costs. As indicated in Chapter

Five, a high fraction of larger Canadian firms have already begun to institute human resource planning systems, so that—as long as affirmative action measures build on these systems—additional costs are likely to be low. Finally, while the potential for putting firms at a serious competitive disadvantage is present in those sectors subject to strong international competition, for other sectors of the economy mandatory action would actually improve the competitive position of firms making efforts to employ target groups by eliminating the “free rider” effect.

While we are able to make this broad assessment of the advantages and disadvantages of a mandatory approach to the institution of progressive employment practices, additional work needs to be done on the evaluation and assessment of administrative mechanisms to determine the ones likely to be most efficient in the Canadian context.

As stated above, the purpose of an affirmative action program is to counteract the systemic barriers that women, Native people, and the disabled encounter in the labour market. Recruitment patterns, educational and other qualifications, and other established employment practices tend to screen out these groups from training, entry, and promotion. Human rights legislation can combat the deliberate barriers against participation, but systemic discrimination requires a more precise instrument to encourage the adoption of progressive employment practices by firms.

The importance of progressive employment practices is that they open the range of employment possibilities to target group members both in job entry and in access to advancement through the internal labour market of the firm. They thus avoid the common error of providing access to employment while leaving in place barriers to mobility and career development. Finally, they go beyond the limits of the case-by-case approach. They are consistent with the merit principle of human resource management and emphasize the need for labour/management cooperation.

A progressive employment practices approach begins with an employer committing the firm to a results-oriented human resources program, not unlike those commonly used for the marketing or financial control areas of the firm. Based on an intensive audit of the work force and employment systems, the employer eliminates systemic discrimination by substituting non-discriminatory employment practices for those having an adverse impact. This ensures that employment practices support rather than hinder the efficient operation of the firm. Special measures are developed to ensure correction of the effects of past discrimination. In some cases, these

compensatory measures may require prior approval by a Human Rights Commission. Goals and timetables designed to permit companies to track changes statistically and to make adjustments when necessary, are integrated into corporate management systems.

As noted in Chapter Five, human resource planning within large firms is becoming far more common than in the 1960s and early 1970s. This development should facilitate the incorporation of affirmative action components into firms' overall human resource plans. Our approach is essentially a strategy for incorporating plans for both hiring and promoting target groups as part of the human resource planning process. Such an approach, undertaken by the employer to fit into the firm's overall needs and objectives, is based on the principles of corporate planning and involves both management and labour.

Federal experience with the promotion of voluntary affirmative action has demonstrated that while employers may be sympathetic to the objectives, they are reluctant to make corporate commitment unless they know that their competitors are also moving in the same way. Other reasons may include the still-limited attention paid to human resource management in the corporate planning process, the failure to grasp the implications of labour market trends and educational profiles (especially of women) and continued traditional attitudes towards women's roles and biases against minorities.

There is evidence that some form of regulatory requirement to adopt progressive employment practices would represent the most economically efficient mechanism to achieve the goal of integrating target groups, particularly if used in concert with other policy instruments to influence supply and demand. In spite of flaws in the U.S. programs, preliminary results of U.S. research indicate that affirmative action measures have improved employment and earnings of black men and white women with higher levels of education, and, to a smaller degree, have helped white women with lower levels of education. The U.S. programs have clearly raised the level of human resources planning and in-house training by firms, often to the benefit of non-target as well as target groups of employees.

Initially the U.S. program was based on quotas which were very crudely determined and set, and was focused largely on attainment of these quotas rather than on problems with the employment practices of firms. It was administered by 16 agencies until 1978, when compliance became the responsibility of a single agency. Based on the preliminary evidence it would seem that many of the difficulties which arose in the United States could be

avoided by focusing on the employment practices of firms and by using a single agency staffed by personnel well grounded in business practices.

Experimentation is now being undertaken within three departments and one corporation of the Government of Canada to assess mechanisms by which progressive employment practices can be instituted within the government. The results of this experimentation should prove most useful, not only in the further expansion of the public service program, but also in assessment of mechanisms appropriate for the private sector. As a major employer the federal government should proceed with this experimentation as rapidly as possible.

With respect to the private sector, the government should increase the resources available to provide information, technical advice and training to encourage employers to modify employment practices to provide increased opportunities for adult women, Canadians of Native ancestry and those with physical or mental disabilities. Given the prospect of a further accumulation of evidence that firms in the private sector continue to consider themselves unable for competitive reasons to adopt progressive practices with the speed and determination that the situation clearly requires, the government should also press forward as rapidly as possible with further analysis, research and discussion related to mechanisms that would be used to bring about the needed results.

As progressive employment practices spread and develop, employers will require increased assistance to plan for the hiring and training of target group members and to locate potential target group employees. Thus the CECs must be in a position to maintain a registry of target group clients and to refer these clients to employers. These registries must accurately reflect the availability of individuals with the requisite skills and must permit rapid access by the referral counsellor. Two steps are required: an efficient mechanism, acceptable to the Canadian Human Rights Commission (CHRC), must be developed and an adequate supply of appropriately skilled (or potentially skilled) clients must be identified for the registries.

Although Section 15 of the Canadian Human Rights Act and Section 139(b)ii of the Unemployment Insurance Act permit collection of data about sex, physical disability and race in support of special programs, there have been considerable problems associated with the development of an acceptable registration system. To ensure that CEIC can meet the needs of firms setting up progressive employment practices, it is imperative that the Commission develop a workable and acceptable system as soon as possible. The mechanism which

emerges should be adaptable to rapid-access placement systems such as MOPS and JOBSCAN, described in Chapter Five. The CHRC requires that necessary data relating to progressive employment practices be separated from information used for standard referral services. This requirement must not result in a clumsy, time-consuming mechanism. Such an outcome would negatively impact on Commission resources, counsellors' attitudes and, potentially, employers' costs. Special efforts are clearly necessary to find an adequate solution to this problem.

Once a system is in place it will be necessary to ensure a suitable supply to fill the registry. This will require not only identification of clients from the normal intake flow but also active recruitment of potential participants and the streaming of clients from training and counselling programs.

Employment Development. Finally, removing systemic barriers and providing programs to support workers to successfully enter the labour force will have a positive impact only where the labour market is capable of producing a demand for workers. Some target group members, especially Native people, live in areas of low economic activity, making employment development measures necessary. These measures to expand employment opportunities in underdeveloped areas and among underutilized people (in both urban and non-urban areas) must be handled within the general context of community economic development, developing the capacity of the group or the community toward greater self-reliance over the long term.

When short- and medium-term job creation programs are used, they must be integrated into longer-term development plans of the community, in addition to providing temporary relief from unemployment. These are described in more detail in Chapter Eight.

Encouraging Flexibility. A policy area related both to employment systems and target group needs is the encouragement of flexible working conditions. Traditionally, part-time and part-year workers have been assumed to have only marginal attachment to the labour force. Yet the current growth in part-time/part-year employment and other flexible work arrangements such as job rotation, commuting to remote employment, job sharing, etc., together with the requirement to utilize the qualified pool of labour that may not be available for traditional work arrangements, has implications for policy.

One in eight working Canadians (13 per cent in 1979) are in part-time or part-year employment and 70 per

cent of these are women. The average growth rate of part-time employment has been substantially higher than the rate for full-time employment. Many parents with young children, older workers, pensioners and disabled people express interest in part-time employment. Demographic trends suggest that alternate patterns of employment will probably become even more popular, as there will be increased numbers of older workers able to extend their working life.

The job rotation, commuting and job sharing arrangements that have been developed in resource projects in isolated areas and in the North provide a means for Native people to participate in the work force and still maintain their traditional community/family activities, thus minimizing social dislocation. As Native people seek to reach a compromise with resource development, flexible alternate organization of work can play a significant role in their adjustment.

Alternative work schedules such as part-time and work-sharing would permit more disabled persons to participate in the labour force. Those requiring a specialized environment to function productively would also benefit from flexible work arrangements that would permit work at home, flexible hours, restructured jobs, etc.

To facilitate the flexible organization of work, the Task Force recommends that a number of factors be modified. The minimum contributory period for both Canada Pension Plan and Unemployment Insurance is an obstacle for many part-time workers. The qualifying requirements should be further reduced or eliminated by defining acceptable "permanent" or "regular" part-time work to allow workers to contribute according to the number of hours worked or to their earnings. Other pension plans, including the federal Public Service Superannuation Plan, could also be made proportional. Wages and accumulation of seniority should be proportional to the hours worked, with full-time work as the basic reference point.

Measures to encourage alternate work arrangements should be supported by flexible management in the provision of training, support by unions and technical assistance to firms prepared to modify the workplace. Governments should assure availability of support services for people with special needs. Examples are removal of physical barriers in the workplace and provision of technical aids to compensate for disability, transportation for the disabled and day care for workers with young children.

Conclusions

The greatest areas of growth in the labour force in the 1980s will be the increased participation of adult

women, and from young Native people reaching labour force age. Disabled workers continue to face employment barriers and a portion of young people and older workers experience long periods of unemployment. Because it is critical that we achieve high levels of growth in the 1980s, labour market policy must be aimed at making full and efficient use of the existing labour force. To do this, labour market policies should be directed at improving the employment situation of these target groups—women, Native peoples, disabled people, youths and older workers—and these policies should be fully integrated into the mainstream of labour market policies and programming. It will not be sufficient to leave programs directed at target groups as add-ons, as discretionary elements or as goodwill gestures.

Labour market policies related to target group members should be directed at two basic levels. The first is entry to employment, the key issue being to get people into jobs. The second level should be directed to providing opportunities to target group members to advance in their jobs. For both levels, these policies should be focused primarily towards demand-side interventions, supported by training, improved labour market information and supports.

Our analysis has led to a number of major conclusions about the measures required to improve the labour market position of target group members.

- Special intensive counselling services should be supplied to target group members for career planning and for adjustment and support assistance. This service must have access to the regular employment services and also be able to utilize the broader community resources.
- Wider availability of employment support services such as post-employment counselling, child care, transportation, and various forms of adjustment assistance will be necessary to ensure that target group workers become successfully established in employment. This will require the cooperation of all levels of government and community agencies.
- An integrated information strategy should be designed to provide information to target group members and to counsellors, schools, parents and communities on the range of employment and training opportunities and trends.
- Training programs should be designed to improve opportunities of target group workers both for entry to employment and for advancement on the job. Entry-level training should be more directly related to employment and special allocations of training

funds should support the demand-side initiatives and career development initiatives outlined below.

- Deep wage subsidies can be used to encourage small employers to employ and train members of target groups, the length and degree of support being related to the level of entry difficulties faced by the workers.
- Wage subsidies to encourage employers to move women into non-traditional occupations should be expanded to cover a wider range.
- Employment development measures should be handled within the general context of community economic development, and should be aimed at developing the capacity of the group or the community.
- Flexible alternative arrangements of work should be encouraged to aid in the employment of those who may not be able to participate in traditional work arrangements.
- In addition to the above measures, the Task Force has concluded that additional steps to ensure the adoption of employment practices which promote the hiring and advancement of the rapidly expanding groups in the labour force, are urgently required. Although we are convinced of the need for action as soon as possible, further work is required to determine and develop the appropriate mechanisms.

Improved absorption of target group members into the labour market will be critical to a smoothly functioning economy in the years to come. To the extent that these groups acquire a greater diversity of skills and experience thus improving their position in the labour market, equity will be increased, labour market adjustment processes will occur more smoothly and the economy will adapt more easily to changing technology and changing demand. In this situation a realignment of policies will assure that the goals of equity and efficiency are mutually supportive.

This chapter has drawn on a number of technical papers prepared for the Task Force. The discussion of women benefitted from papers by Carole Swan ("Women in the Canadian Labour Market"), Heather Menzies ("Women and the Chip" [prepared jointly for the Task Force and the Institute for Research on Public Policy and published by IRPP] and "Informatics Case Studies"), Elizabeth Humphreys ("Technological Change and the Office") and Leah Cohen ("A Review of Women's Participation in Non-traditional Occupations"). The discussion of Native people drew from three papers by Stewart J. Clatworthy ("Patterns of Native Employment in the Winnipeg Labour Market", "The Effect of Education on Native Behaviour in the Urban Labour Market," and "Indian Women in the Urban Market: Issues and Options"). Discussion of the disabled and of older workers drew from papers by Frank K. C. Sampson ("Issues Related to the Labour Force Position of Disabled Workers" and "The Labour Force Position of Older Workers"). Discussion of affirmative action policy benefitted from a paper by D. Rhys Phillips ("Affirmative Action as an Effective Labour Market Planning Tool of the 1980s"). Also useful in this chapter was a paper by Paul Mercier concerning non-traditional work arrangements ("Aménagements non traditionnels du temps de travail").

Chapter Seven

Influencing the Structure of Demand for Labour: Indirect Intervention

Historically, the federal government has played a major role in influencing the nature and structure of employment in Canada. Government has intervened extensively in markets to influence the level, location and type of work available to Canadians.

The earliest and until the last 20 years the most important policy for influencing Canadian employment was the maintenance of high tariff levels. In the period between 1886 and 1947, Canada maintained tariff levels at approximately 30 per cent, a comparatively high level by international standards. The key objective of these high tariff rates was to increase employment in Canadian manufacturing and processing industries. In some cases the Canadian market was protected to enhance the capacity of our industries through influencing the further processing of our raw materials. In other cases the objective was to encourage import substitution activities. In the latter context, "infant industry" arguments were frequently used, the belief being that the new domestic enterprises established because of tariffs would eventually grow to achieve economies of scale and be competitive by world standards.

While Canadian tariffs still remain high for a developed country, participation in the various rounds of GATT negotiations since 1947 has resulted in marked reductions. By 1980 tariffs had declined to an average rate of about 14 per cent. As a result of the recent Tokyo Round, Canadian tariffs will be further reduced to an average rate of approximately 9 per cent by 1988.

The reduction in protection has been accompanied by a rapid increase in other approaches by the federal government to create and maintain employment. These alternative approaches can be subdivided into two broad categories: subsidies (the explicit or implicit commitment of cash outlays) and tax incentives.

The recent experience in the provision of subsidies to industry is summarized in Table 7-1. Cash grants by the Departments of Industry, Trade and Commerce and

Regional Economic Expansion and by the National Research Council have been in the order of \$250 million annually. While these grants have included objectives such as enhancing technological development, influencing the geographic location of industry and assisting small business, a key underlying concern is enhancing employment opportunities for Canadians.

Substantive assistance is also given in the form of subsidized loans, as indicated in Table 7-1. New loans extended through IT&C totalled approximately \$270 million in 1979. Incremental annual financial commitments of the federal government to the Federal Business Development Bank and the Export Development Corporation have been increasing by about \$300 million.

The extensive use of tax concessions to influence employment in Canada is summarized in Table 7-2. While the totals are quite high (\$1.2 billion in 1976, \$1.8 billion in 1979) the data overstate the total "tax expenditures" that were initiated solely to increase employment. In many cases the concessions were instituted for industries needing to attract foreign capital, to bring their taxes in line with those of competitors abroad.

A quantitative comparison of Canadian incentives with those of other countries is difficult because of non-comparability of data. For this reason, a major exercise is now underway by the OECD to produce comparable data for member countries.

While the foregoing subsidies and tax incentives are indirect instruments which represent the primary federal involvement in enhancing the demand for Canadian labour, in the last ten years a variety of direct employment programs has been introduced. The indirect programs rely on firms to act as agents to convert assistance into employment benefits, whereas in direct programs the federal government acts as the employer. The translation of public sector costs to employment benefits could be conceptualized as shown in Figure 7-1.

In this chapter we focus specifically on the indirect programs. Direct assistance programs are discussed in detail in Chapter Eight.

As we head into the 1980s, with the probability of excess demand for labour in many markets and with the recent trend toward slower growth rates in productivity, two concerns emerge: the need to release labour from low productivity uses and the concern that all Canadian geographic regions should share in the anticipated growth. Because of the importance of the array of restrictions, subsidies and tax incentives influencing the structure and nature of employment growth, the Task Force considered it important to examine these instruments although in many cases employment is not the primary objective.

Nature of the Problem

The anticipated directions for the Canadian economy in the 1980s outlined in Chapter Four provide a general context for the need for employment programs to stimu-

late the demand for labour in regions and industries with excess supply.

- Low growth rates are projected in eastern Canada. While excess labour supply is likely both in metropolitan and non-metropolitan areas, the problems are certainly more acute in the latter.
- Labour surpluses are also expected in several traditional industry sectors. Domestic production in manufacturing sectors faces stiff competition from off-shore producers, particularly those in Third World countries. In some cases, foreign competitors receive very substantial government subsidies. A decrease in automotive employment can be anticipated because of changed demand patterns, technological change and strong import competition from off-shore producers.

At the same time, labour shortages are forecast in western Canada and in high-growth industrial sectors. In the absence of government intervention to retain employment in areas of excess supply, market adjust-

Table 7-1

Major Direct Financial Assistance to Industry Having Employment Implications (all expenditures in \$ millions)

	1970/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79
Cash grants									
ITC – DIPP	45.2	48.8	48.3	57.5	48.0	39.0	44.9	43.2	52.2
SIAP	13.7	10.2	31.5	34.5	45.0	58.0	68.0	54.6	59.2
EDP	13.1	27.4	26.5	25.5	29.5	26.9	25.4	34.5	24.2
IRDIA	30.1	31.3	31.9	30.4	26.5	33.0	45.9	16.4	—
DREE – RDIA	60.3	101.9	85.9	101.8	99.0	86.5	81.8	78.2	66.9
NRC – IRAP	6.9	8.4	10.7	12.3	14.7	16.0	14.5	15.4	20.7
Total	169.3	228.0	234.8	262.0	262.7	259.4	280.5	242.3	223.2
Loans (actual per year)									
ITC – DIPP	6.6	9.4	5.6	7.5	6.8	5.9	5.5	4.3	6.0
EDP ¹								4.2	5.3
SBLA	22.3	28.4	32.0	39.9	81.2	90.1	96.4	176.2	258.6
Total	28.9	37.8	37.6	47.4	88.0	96.0	101.9	184.7	269.9
Direct Investment in Crown Corporations (incremental annual commitment)									
FBDB ²	65.1	51.4	56.2	106.2	236.4	197.0	307.0	241.0	267.0
EDC	80.9	118.0	123.9	141.4	93.1	357.4	202.0	84.0	50.8
Total	146.0	169.4	180.1	247.6	329.5	554.4	509.0	325.0	317.8

Abbreviations: ITC (Industry, Trade and Commerce, Dept.); DIPP (Defense Industry Productivity Program); SIAP (Shipbuilding Industry, Assistance Program); EDP (Enterprise Development Program); DREE (Department of Regional Economic Expansion); RDIA (Regional Development Incentives Act); SBLA (Small Business Loans); FBDB (Federal Business Development Bank); EDC (Export Development Corporation).

¹The EDP program replaced a number of previous programs. These included PAIT (Program for the Advancement of Industrial Technology).

²Prior to October 1975, Industrial Development Bank.

Sources: Public Accounts of Canada. Annual Reports of: Department of Industry, Trade and Commerce; Small Business Loans; Export Development Corporation; Federal Business Development Bank.

Table 7-2

Government of Canada — Tax Expenditures
Which Stimulate Employment

	Estimated amount (millions of \$)	
	1976	1979
Manufacturing Sector		
Lower corporate tax rate on manufacturing and processing profits	280	400
Investment tax credit on manufacturing and processing assets	40	225
Two-year write-off of manufacturing and processing assets	320	425
Excess of tax depreciation over book depreciation	70	100
Research and development		
Immediate write-off of research and development expenditures	40	65
Additional research and development allowance	—	35
Investment tax credit on research and development	—	50
Labour force		
Employment tax credit	—	75
Income maintenance		
Exemption of clothing and footwear from sales tax	465	440
Total	1,215	1,815

Source: Dept. of Finance, Government of Canada Tax Expenditure Account, December 1979.

ments would be brought about through falling wages and income and rising unemployment in these areas, and rising wages and income in areas of surplus demand. Over time, through migration and changes in relative prices of output from low and high growth regions, there would be a release of labour from low to high growth regions and sectors, resulting in a new equilibrium. Differential unemployment rates and wage rates between regions would still remain, however, because some workers in surplus areas and industries would attach psychic values to continuing to live and work in their traditional areas in spite of higher unemployment and lower wages.

Against the foregoing background, the government intervenes for three reasons.

- Labour in surplus areas can be utilized more efficiently. It takes time for labour to migrate, and some workers are extremely reluctant to move (e.g., older workers and those with significant housing

investments). Consequently, there can be net gains in national output from maintaining a certain level of demand in these areas. That is, Canadians as a whole will be better off as a result of some government transfers to stimulate demand.

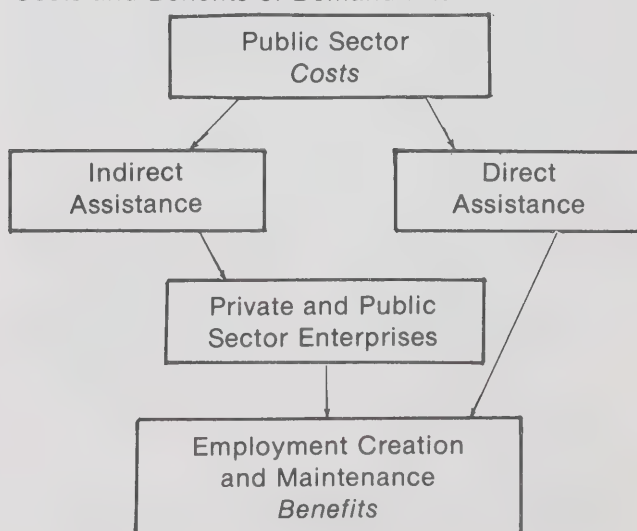
- Economic activity can be distributed in a manner that is socially acceptable. Over and above the need to stimulate demand in surplus labour areas for productivity reasons, there can be a further need to avoid substantive population shifts because of the great danger of social and political tensions.
- Strength in certain industrial sectors must be maintained for strategic reasons. In many instances the federal government has subsidized production in industrial sectors (e.g., in several cases in the aerospace industry) when clearly there has been a net sacrifice in the level of national output. These activities can be justified for non-economic reasons such as producing defence goods and maintaining a presence in high-technology industry.

Thus federal government intervention to stimulate labour demand in regions or industries of surplus supply involves highly complex trade-offs between productivity goals and distributional and strategic goals.

Having reviewed the nature of the general considerations with respect to the indirect influencing of labour demand, we will focus now on guidelines for effective intervention. Our analysis addresses two fundamental questions: when and how should the government intervene?

The level of intervention should not result in unnecessary transfers to the firms. We consider that the effective

Figure 7-1
Costs and Benefits of Demand Intervention



tiveness of intervention will vary greatly, depending on the particular instrument being utilized (e.g., tax concessions, cash grants, and so on) and the characteristics of the firm.

When to Intervene

The federal government pursues active labour market policies primarily for two reasons.

- It intervenes to improve overall welfare through increased output and employment. While some Canadians may gain and others lose, intervention should result in net gains for the economy as a whole.
- It intervenes to improve the distribution of welfare among Canadians. Alleviation of the disparities between different groups is one of the key goals of government policy. In these cases, improved distribution may warrant a net overall cost.

All government policies have both efficiency and equity implications. The programs discussed in this chapter, although used primarily to influence the level of output, also have a significant effect on the distribution of incomes. Conversely, programs with equity as their primary focus, described in Chapter Six, also have an impact on the aggregate level of welfare. In both cases, the distributional effects and the effect on overall efficiency must be recognized and evaluated. This can be accomplished by analyzing separately the various costs and benefits, and their distribution, arising from particular programs and kinds of intervention.

Several types of benefits may result from government intervention aimed at influencing the demand for labour indirectly. Given the focus of the Task Force, we have concentrated our analysis on the net gains to employment and output. In this context, the net gain as a result of the government involvement is simply the “value” of the output of labour in the new activity less the “value” in the activity forgone.¹

In general, the “value” of the output of labour in a new activity is just the wage rate. In a few circumstances, labour is hired for its direct services and the value of its output can be measured in a straightforward manner. For example, when a homeowner hires a painter at a mutually acceptable fee to paint his house, the fee represents the value of the painter’s services to the homeowner. This provides a very direct measurement of the value of output.

In most cases, however, the demand for labour is a derived demand and there is no direct measure with respect to the value of its product. Both direct and indirect measures are involved in valuing labour output. For example, a paint manufacturer will only decide to hire more workers to expand production if the price customers are willing to pay for his additional output of paint covers all his incremental expenses. These include not only increased labour costs but an adequate return on incremental investment in plant and equipment, increased selling and administrative expenses, incremental utilities required, and the additional input materials needed for production. The firm will only hire more workers if their contribution to output is worthwhile in relation to all of the interrelated issues.

The wage still would represent the best measure of the “value” of the worker’s output. The net gains as a result of employing the labour involve deducting from the wage the “value” of the alternative output forgone. The latter is referred to by economists as the “opportunity cost” of labour. This concept, while fundamental to the economics profession, is very frequently misunderstood. Two examples from Samuelson and Scott (1968) illustrate the principle:

Some of the most important costs attributable to doing one thing rather than another stem from *forgone opportunities* that have to be sacrificed in doing this one thing. Thus, Robinson Crusoe pays no money to anyone, but realizes that the cost of picking raspberries can be thought of as the sacrificed amount of strawberries he might otherwise have picked with the same time and effort. The sacrifice of doing something else is called “opportunity cost”. Note that it exists even if he loves to spend that hour in doing both kinds of picking and recognizes not the slightest disutility or sweat in performing that type of work....If my labour in wheat could have been used in rye or even in some other man’s wheat patch, then its value in those uses has to be met or I shall not continue to supply it to my own wheat patch. For these reasons, full competitive costs intimately involve opportunity cost. The latter is an important concept, which involves much more territory than does the notion of implicit costs. (p. 514)

Permanent Employment

To illustrate the quantitative impact of the net gains from increasing the demand for labour, consider the implications of creating new permanent jobs. Filling these job vacancies will result directly or indirectly in one or a combination of the following three effects.

- The participation rate increases as new workers enter the labour force.

¹ The presentation of the economic framework associated with influencing the demand for labour is highly complex and involves considerations beyond those presented in this chapter. For the interested reader, a more comprehensive description is included in Appendix A.

- Workers move from other employers and output decreases elsewhere.
- Workers move from the unemployed pool.

We would expect the net benefits from the first two possibilities to be modest. New participants enter the labour force because the likelihood of finding work has increased marginally. Similarly, in the vast majority of cases workers change jobs for only minor gains in remuneration.

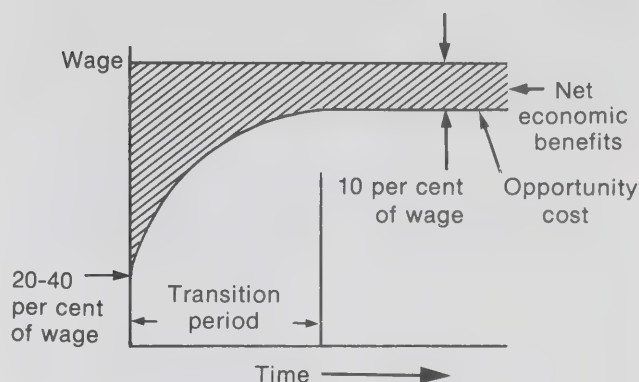
In the case of hiring from the unemployed, the calculations are more complex but we conclude that here, too, the gains will be modest. Hiring an unemployed worker should not be thought of as resulting in a *net* reduction of unemployment. When an unemployed worker is hired, the individual's alternatives would otherwise, over time, have consisted of sequential periods of employment and unemployment. The net result is an increase in the probability of those workers who endure unemployment spending a higher percentage of their time in employment. Wages increase marginally and there is consequently some disappearance of employment opportunities. There are however some overall benefits from this sourcing since there is some reduction in the UI burden. Hence the gains in this case are somewhat greater than those described above.

Based on our preliminary examination of Canadian experience, including historic sourcing patterns, we conclude that the ongoing net gains from permanent employment creation in markets characterized by excess supply of labour are in the order of 10 to 15 per cent of the wage bill. There are, of course, circumstances under which the gains can be greater or less than this amount. We will discuss some examples in the next section of this chapter.

In the short run the gains from the incremental creation of permanent jobs can be considerable, particularly in thin labour markets with an over-supply of workers. The creation of new employment opportunities in this case can draw very significantly from the stock of unemployed workers in the local area. Over time, however, with the existence of very substantive in- and out-migration, unemployment rates will be re-established in historic relationships with other regions. Thus from initial gains of approximately 60 to 80 per cent of the wage bill, the benefits from employment creation will gradually decline over a period of one to two years to the long-run equilibrium level as indicated in Figure 7-2. Our analysis suggest this to be about 10 per cent.

Hence, the Task Force emphasizes that the benefits from employment creation should be viewed in a dynamic context. It can be seen that the overall benefits of creating permanent jobs, when both the long- and short-

Figure 7-2
Gains From Permanent Employment



run effects are taken into consideration, are typically in the order of 10 to 15 per cent.

For elaboration of the concepts described above, the reader is again referred to the appendix to this chapter.

Up to this point we have been using the phrase "opportunity cost" to indicate the value of the alternatives that workers forgo in accepting new employment. This concept is referred to by economists as the "social opportunity cost of labour." From the perspective of Canadian society, it represents the value of a composite package (gross-of-tax wages, UI payments, the value of non-market time and so on) that are given up when a worker accepts a new position.

The concept of the social opportunity cost is frequently clouded by several misperceptions. One is the "zero opportunity cost" argument whereby many proponents of government intervention justify involvement on the basis that additional employment results, either directly or indirectly, in a corresponding reduction in the unemployed. Another is the "forgone output" argument whereby many analysts suggest that the appropriate economic costs of employing a worker is the wage that he forgoes in other employment.

A recent claim by a member of the Ontario legislature for Lanark reflects a common view regarding the implicit social opportunity cost for labour:

Wiseman says Lanark residents have little to complain about. In five years, 89 loans worth more than \$15 million have been poured into manufacturing and tourist industries to create more than 3,600 jobs. ("Opponents seek to end 81 years of Tory rule," *Ottawa Citizen*, March 1981, p. 51.)

The reader is left with the impression that the 3600 persons employed in ventures supported by government aid would have otherwise been unemployed and producing nothing. That is, the implicit assumption that the social opportunity cost is zero. A much more appropriate beginning point is to assume that the social opportunity cost is the worker's before-tax wage and to make adjustments from there.

The zero opportunity cost argument is probably most often applied to those cases where unemployed workers are hired. However, we indicated earlier that unemployment should be considered in a dynamic as opposed to a static context. We illustrated that workers who are not employed permanently pass through states of employment and unemployment with great regularity. Thus, in hiring an unemployed worker, one is asking him to give up the alternative earnings of his normal employment and unemployment experiences. Canadians employed in forestry, fishing, tourism and construction represent typical examples of workers who are intermittently employed. Again, clearly in these cases the social opportunity cost of labour is significantly greater than zero.

To further illustrate the inapplicability of the zero opportunity cost assumption, consider farm workers in Canada. For many years there has been a continuing migration from rural to urban areas of the country. This migration has continued despite a perceived need for additional workers at the prevailing wage. Thus even in a sector of the economy where the labour force has decreased sharply, the social opportunity cost is significantly greater than zero.

The Task Force suggests that it is most appropriate to assume that the social opportunity cost is much greater than zero and the analysis of the benefits of employment creation should be based at the start on the premise that it is close to the prevailing wage.

In some cases the wages in forgone employment may be an underestimate of the true opportunity cost of labour. This will be particularly true in remote areas where a premium is required to compensate a worker for conditions of isolation, deprivation of social amenities and a harsh working environment. For example, evidence from the construction of the Churchill Falls power project, where the wage rates were very much higher than those prevailing for similar occupations in Newfoundland, indicates that a large premium was required to attract workers to the project. Despite the premium paid, turnover rates were very high. The average duration of employment spells at the dam site was less than six months. Also, insufficient workers were found in Newfoundland and about 30 per cent of the work force had to be "imported" from Quebec.

The discussion so far has concerned the anticipated benefits from creating permanent employment in areas of excess labour supply. Additional insights are needed in considering the implications of employment benefits from stimulating employment in some special cases. These are:

- the creation of intermittent or temporary employment;
- the asymmetry that exists between creating and maintaining employment opportunities; and
- the creation of employment opportunities for special subgroups of the population.

Temporary Employment

As noted in Chapter Three, the Canadian labour market could be subdivided into two groups.

- The "permanent sector" consists of workers who never or rarely experience unemployment.
- The "temporary sector" consists of workers who experienced unemployment frequently and with great regularity.

The temporary sector varies in size between geographical regions but in the majority of cases represents between one-fourth and one-third of the labour force. The economic impact of creating temporary jobs differs very significantly from that of creating permanent jobs.

Consider a case in which three workers each produce \$20,000 of output over a year. One works full time over the year, another puts in the same amount of time in more compressed periods over six months, and a third is able to produce the same annual output working for six months and putting in half the work time. In theory, the Canadian economy is indifferent between the three situations, suggesting that there are no detrimental effects from temporary employment if productivity remains the same.

In reality, however, workers who are employed for less than a year generally produce much less than a year's output. If, for example, seasonal work employs two persons for six months and they spend the remaining six months unemployed, the overall productivity is half as much as it would have been had they been permanently employed, assuming that their hourly output is the same in each case.

The worker's incentive for accepting temporary employment is enhanced by two factors. First, unemployment insurance compensation ensures that his gross-of-tax remuneration will not decrease proportionately as his time employed is shortened. Second, progressive personal income taxes reduce the incentive for incremen-

tal employment. That is, the worker's well-being is determined by his annual "remuneration package" (net-of-tax wages plus net-of-tax UI benefits). However, while UI payments and decreased taxes represent benefits to the individual, they are costs to society. Thus there can be, from the latter perspective, major costs to temporary work.

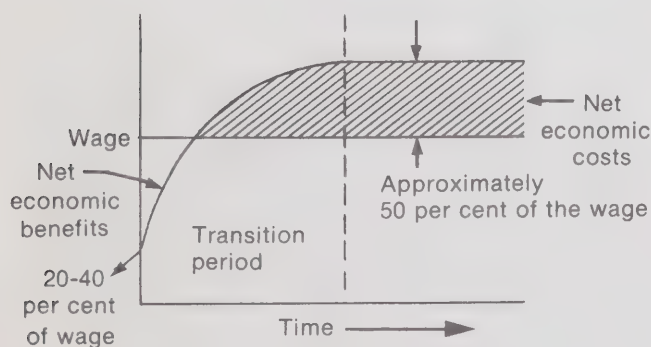
Our analysis suggests that considerable caution should be exercised in using programs to stimulate demand for temporary employment. Many of our sectors are very seasonal (e.g., fishing, forestry, tourism), while others are very cyclical (e.g., automotive, farm machinery).

To obtain a measure of the costs and benefits of temporary job creation, the Task Force considered the historical data from two slow-growth regions of Canada — the Sherbrooke area of Quebec and the Cape Breton Island area of Nova Scotia. We found that in long-run equilibrium, the social opportunity cost of labour in average temporary jobs was about 150 per cent of the wage bill. That is, creating temporary jobs in these areas has the net effect of making Canadians worse off (to the extent of 50 per cent of the wage bill) than if intervention had not occurred.

While creating temporary jobs would probably result in initial gains similar to permanent employment, the long-run effects (after one to two years) would be the losses described above. Each person-year of employment created would require more than one worker to fill it. Hence, the number of labour force participants engaged in intermittent work would rise, UI payments would go up and taxes would be forgone. The time profile of gains and losses is represented in Figure 7-3.

Figure 7-3

Benefits and Costs of Temporary Employment



Creating vs. Maintaining Employment

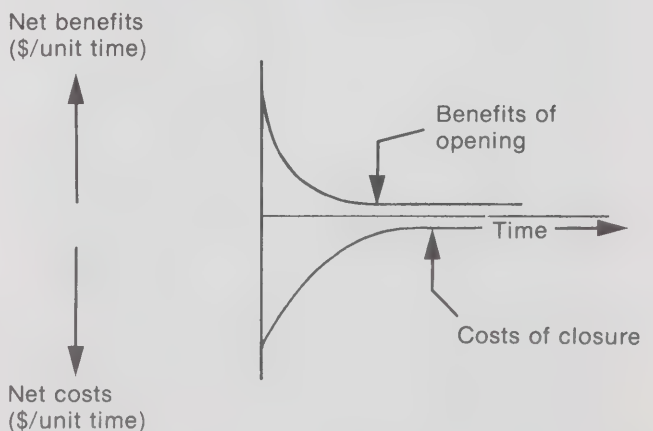
Plants are continually starting operations while others are closing. This simultaneous creation and destruction of employment opportunities is one of the primary contributing factors to frictional unemployment. There is a very important asymmetry between the economic benefits of creating employment and the economic costs of terminating employment. This asymmetry, which is not intuitively obvious to many observers, has important implications with respect to the federal government's interventions in labour markets.

Consider two simultaneous occurrences. One firm closes with 1000 employees losing their jobs, while at the same time a second plant opens in the same community employing 1000 workers. Our research suggests that these concurrent happenings result in a significant economic cost. Many employees from the shutdown firms will experience an appreciable period of unemployment. Some will have transferable skills meeting the needs of the new plant. Some will find jobs elsewhere in the community or gradually migrate out of the community to seek work. Still others will drop out of the labour force. Thus, compared with keeping the plant open the net costs to society from the plant closing will be high at first and decline through time as workers find other jobs, as is shown in Figure 7-4.

In the case of the plant opening, some of the workers will be drawn from the plant that has just closed and in the short run great gains will be achieved because many of them would otherwise be unemployed. Other employees will have to be recruited from outside the community or from other employers. Little gain would

Figure 7-4

Asymmetry of Creating vs. Maintaining Employment



accrue as a result of hiring these latter employees because the firm would essentially have to bid them away from other employers outside the community and induce them to undertake the financial and social costs of moving. The gains from the plant opening are very large at first but fall rapidly to zero or become negative as the employer must seek labour from outside the community.

Figure 7-4 has been drawn so that the total costs of the closure exceed the benefits of the opening. This net loss from the simultaneous opening and closure of the same type of plant represents the adjustment costs incurred by society — time lost due to unemployment plus relocation and retraining costs.

Because of this asymmetry, there is some justification, other things being equal, to maintaining instead of creating equivalent jobs. Because in practice other factors seldom equate, the analysis would suggest delaying the closing of plants somewhat beyond the point where disappearance would have occurred given normal market forces.

Some Special Considerations

Although our perceptions regarding the overall net benefits or costs for creating permanent or temporary jobs apply for the vast majority of Canadian employment situations, there are exceptions. Some cases exist where the benefits could be significantly greater than we have described.

- Entry to some occupations is restricted to members of a union or professional association. (This is sometimes called the “protected sector”.) This practice tends to create an artificial labour shortage, permitting workers to receive wages appreciably above the level that is just sufficient to induce them to accept the position. It follows that if output can be expanded beyond current levels, new workers would reap abnormal gains and the social opportunity cost would be significantly less than the wage. A typical example is the creation of incremental jobs in automotive assembly. Automotive assembly does not involve highly skilled trades and wages are clearly above the level that the workers could command elsewhere. The willingness of workers to forgo wage increases in the recent Chrysler difficulties illustrates the losses that they perceive from the possibility of having to change employment. Hence, if it were possible to increase the output of automobiles, appreciable gains would accrue to workers (i.e., their social opportunity cost is significantly below the wage).
- Major benefits can accrue when workers have difficulty in participating in the normal labour

market. The problems experienced by several groups are discussed in Chapter Six. For these workers the social opportunity cost can be much less than we have described earlier. An example would be the federal government take-over of Canadair in the mid-1970s, which preserved the employment of the firm’s 1700 workers, many of whom were older workers who would have had difficulty finding new jobs. Because of the reduction of activity, the work force had decreased from a peak of about 11,000 employees over a number of years. The average age of the company’s labour force (consisting primarily of skilled aerospace workers) was about 55 years. Evidence indicated that the most likely alternative employment for these older workers (e.g., driving taxis) would have resulted in a major loss in pay. Hence the social opportunity cost was well below the wage and the maintenance of employment resulted in appreciable economic gains.

In other cases the benefits could be less (or the costs more) than we have described.

- First, the estimates of net benefits in the order of 10 to 15 per cent of the wage bill applies to incremental employment creation in thin labour markets characterized by some degree of excess labour supply. Much smaller gains would be expected from creating jobs in high-growth or deep labour markets. Creation of jobs in markets characterized by excess demand would result in social losses.
- Second, unfavourable working conditions can make the wage an inappropriate indicator of the social opportunity cost. In our discussion of the “forgone output” argument, we have already indicated that the higher wages at remote work sites do not represent gains to the worker but compensation for unfavourable circumstances.

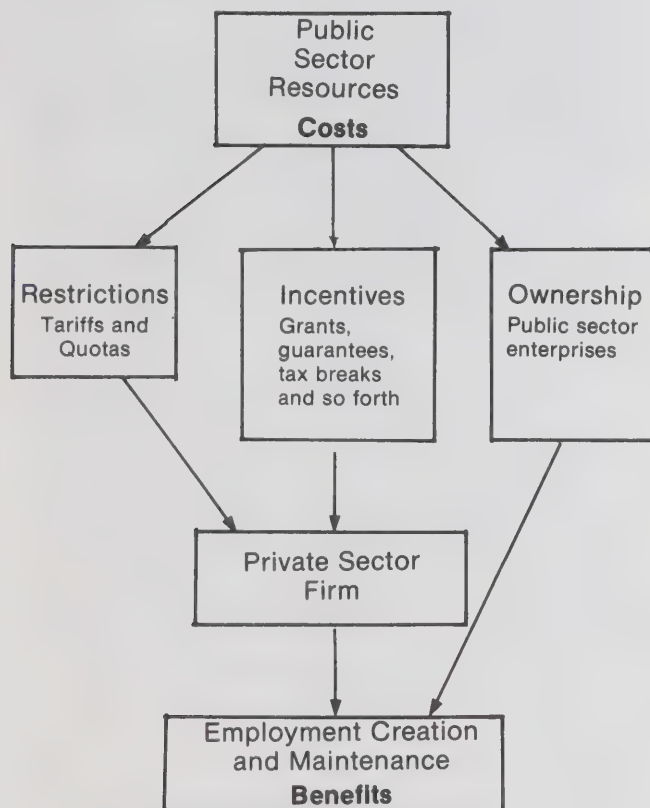
How to Intervene: General Considerations

Earlier we indicated that the federal government utilizes a variety of indirect approaches to influence employment. The effectiveness of generating and maintaining employment is dependent first on the instrument (e.g., tax incentives, grants, and so on) used by the federal government to influence decision-making in private and public sector enterprises, and second, on the characteristics of the firms being influenced. In developing a paradigm, we have subdivided the various indirect instruments to influence employment into three categories:

- restrictions (protecting Canadian employment by various tariff and non-tariff barriers);
- incentives (influencing the employment decision-making of corporations by cash grants, concessional loans, guarantees, tax incentives and so forth); and
- ownership (utilizing a subset of public sector enterprises specifically for employment purposes).

Figure 7-5 conceptualizes the indirect linkages between resource costs and employment.

Figure 7-5



Incentives

Incentives to influence the decision-making of firms and hence to encourage the creation of new jobs or maintenance of existing employment can be justified for a variety of reasons. As discussed elsewhere in this report, the social opportunity cost of employment may be less than the private sector wage bill and hence may provide a justification for intervention. Where the intervention represents an investment in human capital (e.g., through training programs), it frequently is highly uncertain that a particular private sector firm can appropriate the benefits from an investment in upgrading of skills.

Three fundamental questions arise regarding incremental public sector involvement for employment creation purposes.

- Do the economic benefits exceed the economic costs? That is, are Canadians in aggregate better off as a result of the public sector involvement?
- Has the cost of the intervention been minimized? That is, has there been an unnecessary transfer to the private sector for the particular change in investment behaviour induced?
- Has the intervention been structured in such a way as to induce subsequent undesirable private-sector decision-making from the standpoint of maintaining employment?

To address the foregoing questions and develop some preliminary comments regarding the desirability of alternative instruments, four incentives will be discussed: direct cash grants, concessional or "soft" loans, loan guarantees, and tax incentives (including accelerated depreciation). While all interventions have both equity (distribution) and efficiency (aggregate welfare) effects, the focus will be on the latter.

In order to compare different incentives with respect to their effectiveness on generating employment, it is important, first of all, to put them on a comparable footing with respect to costs. It is futile to compare a loan guarantee with a tax incentive, for example, without being able to relate their comparative costs to Canadians. We have chosen to use "cash grant equivalent" dollars as a very appropriate means of relating the four types of incentives. Using the cash grant as a numeraire for comparison we can then relate it to the relative benefits.

The "grant equivalent cost" of the other types of incentives is briefly as follows.

- For concessional loans it is the present value of the interest rate subsidy. This subsidy is the difference between the "soft loan" rate from the government and what the firm would have to pay on a truly arms-length basis.
- For guarantees (or contingent claims) it is the present value of the anticipated payoffs.
- For tax incentives it is the present value of the taxes forgone.

In making the above cost comparisons it is very important to use an appropriate discount rate to relate future government commitments (e.g., forgone taxes to current dollars or "cash grant equivalent"). The discount rate varies significantly with the risk involved. For example, a riskless asset such as Canada Saving Bonds

would have a discount rate of about 2 per cent real (net of inflation), whereas the discount rate associated with a corporation of normal risk would be in the order of 11 per cent real. For firms of below average risk, the risk will be between 2 and 11 per cent. For firms of above average risk the discount rate will be above 11 per cent real.

While an exploration of the issues associated with risk premiums clearly goes beyond the scope of this report, we can make certain comments regarding risk and the associated discount rates for the various instruments.

- For tax incentives where the tax rate is altered, the discount rate would reflect the risk of the firm's industry (e.g., 11 per cent real for firms having average risk).
- For tax incentives in the form of accelerated depreciation and for widely diversified tax-paying firms, the appropriate rate is the riskless rate (2 per cent real). There is a virtual certainty that the company will reap the benefits and the government will bear the costs.
- For loan guarantees, the probabilities of payoff are objectively evaluated and discounted at the riskless rate.
- For concessional loans, the government cost is highly certain; hence discounting should be at the riskless rate.

Having described an approach to reduce all incentives to a common denominator (grant equivalent dollars), it is possible to value different incentives packages. This is particularly important since inducements to corporations very frequently take the form of a mix of incentives.

After costing the various incentives, it is necessary to consider the potential distortions introduced into the decision-making of private sector firms. Two types of distortions are of particular concern.

- Adverse project selection refers to the selection of incentives that may influence the firm to choose a project that is not optimal from a social perspective.
- Perverse operating inducements refer to the selection of incentives that may influence the firm to make on-going operating choices that are not socially optimal.

Because of the ease of relating to direct cash grants, they will be used as the basis of comparison for alternative incentives for employment purposes. For cash grants we are concerned with the potentially adverse effects of "front-ending." When the firm gets all the assistance in the initial time period, its incentives to persevere in subsequent downturns may not be as great as with some

form of continuing assistance. This disadvantage could be corrected in the case of cash grants by correlating the payout with the continuity of employment (i.e., holding back grants based on the firm fulfilling employment objectives).

Tax incentives have a number of disadvantages.

- They are not universally applicable. Many small entrepreneurial ventures are not tax-paying. Depreciation, tax shields, start-up expenses often mean that in their early years new firms are not taxable.
- They are normally general, not specific, incentives. Considerable "waste" can occur because the incentives may provide unnecessary inducements to firms that would proceed on their own.
- "Leakages" outside Canada reduce the effectiveness of these inducements. With 50 per cent of the Canadian manufacturing and mining sectors owned by U.S.- controlled firms, the net value of decreased Canadian tax rates is greatly reduced. Tax benefits in Canada result in increased taxes in the United States when funds are repatriated, the net result being a transfer from the Canadian to U.S. treasury.
- They are uncertain. That is, with values contingent on profitability, they do not compare favourably with grants when the expected values of the two instruments to the firm are the same.
- They are capital-biased and very difficult to structure in such a way as to relate directly to labour.

Concessional loans and loan guarantees also have disadvantages for employment generation.

- They are relevant to only a subset of potential applicants. For firms with ready access to capital markets, the value of concessional loans or guarantees are reduced markedly.
- They can influence firms to introduce high debt loads in their capital structures, making them less capable of withstanding cyclical swings and of remaining solvent. Unfortunately, labour will bear the costs of this induced higher risk.
- Guarantees in particular can detract from the likelihood of the firm engaging in follow-on investments that would generate additional employment. Because the value of the guarantee will go down as the firm increases its equity investments for expansions, there is a retarding effect on incremental investments.

The latter disadvantage of loans and guarantees can be greatly reduced by structuring the instruments so

that the government shares in the up-side gains as well as in the down-side losses. Taking warrants on the firm's shares would be one way to ensure that the government will participate in any very high gains. Approaches like warrants tend to prevent the firm from accepting very high risk with labour ending up bearing the burden.

Another means of reducing the problems associated with guarantees is to have the government stand behind only part of the debt. This approach would assist in bringing the objectives of the private and public sectors more into line.

The foregoing evidence suggests that for the purpose of employment generation a cash grant would be the preferred incentive in the vast majority of circumstances. To maximize the benefits of employment generation by subsidiaries of foreign-owned firms, the grants should be made taxable. Their impact could be maintained by establishing gross amounts to provide the same net-of-tax benefits. This treatment would be equitable for Canadian-owned and non-Canadian-owned companies and would ensure that the transfers to foreign-owned firms do not just represent transfers through the firms to the tax burden in the home country. This approach would, of course, increase the incentives in relative terms to non-tax-paying firms, the majority of which would be Canadian-owned.

Cash grants can be structured to influence the creation and maintenance of job opportunities. By developing a formula that relates the payout to the firm to initial employment and continuation of employment (e.g., through holding back a fraction of the grant based on performance), problems of "tilting" the firm's decision-making to capital-intensive processes can be alleviated.

Restrictions

The maintenance of employment has been a primary justification for the retention of tariff and non-tariff barriers. In this report we present only a brief examination of the implications of quotas, without discussing the diverse array of other non-tariff barriers such as procurement policies, standards, and so forth.

Tariffs and quotas have several disadvantages as methods of employment retention.

- They tend to be general rather than specific instruments and cannot be aimed exclusively at specific firms and groups of employees.
- The costs are not readily apparent because they are spread among large numbers of consumers.
- The overall costs to Canadians are great.

Tariffs have the overall effect of imposing costs on consumers to maintain employment in marginal firms. The net costs reflect both inefficiencies of some producers and reduced consumption due to higher prices. In addition, transfers are made from consumers to the more efficient producers as windfall gains, and to government through tariff revenues.

The Task Force has commissioned on-going research to document the economic costs associated with using tariffs for employment maintenance purposes. While this research is not complete, it clearly indicates that the cost-per-job of tariff policies varies considerably between industry sectors and can be extremely high. The reduction or elimination of particular tariffs would result in the disappearance of a limited number of inefficient producers. The output forgone by these domestic firms will be made up in part by increased imports and in part by an expansion of existing efficient domestic producers. Two conclusions emerge.

- The net reduction in employment would not be nearly as great as is usually feared.
- The cost-per-job of utilizing tariffs to maintain jobs is frequently very high.

While these conclusions hold in aggregate, it is true that particular pockets of employment (e.g., in remote communities and among workers having limited flexibility to transfer) could be very seriously affected. In these cases, however, it would be much more preferable to use targeted subsidies to either employees or employers. In Chapter Eleven we discuss the creative use of adjustment assistance policies for these cases.

Quotas provide significant protection from imports, and hence protect employment, in four major sectors of the Canadian economy: agricultural products, textiles, clothing, and footwear (Jenkins, 1980). Since agricultural quotas are closely linked to the activities of national marketing boards designed to limit overall supply and improve farm incomes, they will not be discussed further in this report. Quotas against products in the other three sectors are designed primarily to protect employment in Canada and hence are of direct interest to the Task Force. Recent data indicate the following total employment in each of the sectors: footwear — 16,800 (1978); textiles — 87,000 (1979); and clothing — 95,000 (1979).

In the case of footwear, a global quota was imposed in late 1977. A limit was established for leather and vinyl footwear (accounting for 85 per cent of the value of all footwear) at the level of historic imports in the 1974 to 1976 period. It was not possible to obtain data regarding the employment protected and the economic costs associated with this quota.

Canada in weighing any Canadian investment opportunity against foreign possibilities.

The major factors influencing investment decisions vary greatly between the above categories (see Table 7-3).

The needs of regional Canadian-owned firms for incentives or protection are the least difficult to determine. These firms normally have very restricted access to capital markets and thus the level of assistance required can be determined by analyzing their anticipated cash flows under different business risk scenarios.

For Canadian interregional or national firms, the perceptions of interprovincial differences in political and economic risk must be added to the financial analysis. Two important points have been demonstrated with respect to political and economic risk.

- Interprovincial differences are appreciable.
- Corporate decision-makers are systemic thinkers and evaluate interprovincial differences in holistic terms.

It has been found that for international firms, corporate decision-making differs depending on whether the firms are focusing on Canadian or foreign markets. For those companies producing primarily for Canada, transportation or tariff barriers have normally segmented the Canadian market. In these cases an understanding of the evaluation of strategic considerations (e.g., maintaining or establishing a market position in Canada) has been found to be very important in determining the need for assistance or protection. Location decisions within Canada will still be dependent on the firm's holistic assessment of interprovincial differences in political and economic risks. Depending on whether the importance of strategic factors is considered to be overwhelming, the financial analysis of the investment may or may not be of great relevance.

For international firms focusing on foreign markets (companies having global or continental product mandates), the Canadian market is of minor importance and hence strategic factors are not relevant to decision-making. The evaluation of Canadian investment alternatives in this case will be based on the financial analysis of the Canadian alternative supplemented by the firm's holistic valuation of political and economic risk in Canada versus the foreign (usually U.S.) alternative. Again, location choice within Canada will include a consideration of quantifiable financial criteria supplemented by an evaluation of differential political and economic risk between provinces.

The valuation of alternative incentives (cash grants, concessional loans, guarantees, and tax incentives) by

the private sector will depend on the firm's access to capital markets and its tax position.

Regional firms and national firms (see Table 7-3) would include a high percentage of companies with limited access to capital markets and in a non-tax-paying position, which would favour cash grants, concessional loans and guarantees. The international firms and larger national firms would be expected to favour cash grants and tax incentives. Because of their ready access to capital markets, they would place a lower value on guarantees or concessional loans.

In summary, the analysis of alternative incentives from the perspective of a range of private sector firms does not conflict with our earlier conclusion that cash grants represent the preferred type of incentive for influencing employment. The foregoing discussion illustrates, however, that the determination of the required level of assistance to ensure that creation and maintenance of employment can be a highly complex process. It involves, in many cases, determining the value of difficult-to-quantify factors such as political and economic risk and strategic factors.

We have not focused on the relationship between restrictions (tariffs, quotas, and so on) and the characteristics of firms, because of the lack of research in this area. However, one would expect that the effects would depend on two factors. Economies of scale in manufacturing, transportation, marketing and so on would tend to suggest that the smaller firms (probably including a disproportionate number of Canadian-owned firms) would be most seriously affected. However, because of the flexibility that large international firms have to alter the focus of their activities, there is a possibility that the Canadian employment decisions of these companies may be affected to a greater degree by changes in restrictions. Empirical research would be required to determine which of these two factors predominates.

Public Sector Enterprises as Agents

In Canada, public sector enterprises have been used extensively for a diversity of public policy purposes. There are approximately 460 federal and 225 provincial public sector enterprises with a total employment of 200,000 to 225,000.

The Task Force was particularly interested in examining those public sector enterprises that exist primarily to create or maintain employment. We categorized enterprises according to the nature of activity. Two categories were of particular relevance for employment. Industrial development was one activity in which several provincial

Table 7-3
Incentives and Private Sector Decision-Making

Investor categories	Primary factors Influencing firms' investment decision-making	Anticipated incentive preference	
		Private sector perspective	Public sector perspective
1. Local entrepreneur (manufacturing only in one Canadian region)	—Quantifiable financial forecasts	Cash grant, concessional loan, or guarantee	Cash grant ¹
2. National firms (manufacturing in more than one Canadian region)	—Quantifiable financial forecasts Plus Holistic valuation of interprovincial differences in political and economic risk	Cash grant, concessional loan, guarantee, or tax incentive	Cash grant ¹
3. International firms focusing on domestic market (manufacturing at least in Canada and in the United States)	—Quantifiable financial forecasts Plus Holistic valuation of interprovincial differences in political and economic risk Plus Holistic valuation of strategic factors relevant to Canadian market	Cash grant or tax incentive	Cash grant ¹
4. International firms focusing on foreign markets (manufacturing at least in Canada and in the United States)	—Quantifiable financial forecasts Plus Holistic valuation of interprovincial differences in political and economic risk Plus Holistic valuation of international differences in political and economic risk	Cash grant or tax incentives	Cash grant ¹

¹ The cash grants should be structured to ensure a continuity of employment. This would suggest a "hold back" provision in payouts — with funds being advanced based on demonstrated employment performance. From a public sector perspective this would enhance the incentives to continue operations.

provincial corporations are involved in providing concessional loans, guarantees, and infrastructure to improve employment opportunities. Since the incentives provided by these provincial corporations are not covered elsewhere in the Report they will not be discussed further here. Second, and of most direct relevance, are the "failure or rescue" situations where the federal government has established a public sector enterprise to maintain employment in response to the failure of a private sector firm that created severe socioeconomic hardships. This section of the Report, therefore, will focus on the latter subset of public sector enterprises.

The Canadian experience in corporate takeovers differs from that in the United Kingdom and Western Europe, where public sector ownership has very frequently been associated with the nationalization of entire industries. In Canada, public sector ownership has been undertaken frequently to overcome the social and economic dislocation associated with the failure or potential failure of dominant firms in thin labour markets. Examples include the Cape Breton Development Corporation (Devco), Sydney Steel Corporation (Sysco), Ocean Falls Ltd. and Labrador Linerboard.

Not all Canadian failure or rescue cases, however, are associated with slow-growth regional labour markets. For example, the federal government took over DeHavilland Aircraft of Canada in 1974 and Canadair in 1976. In both cases the firms were in some difficulty and considerable uncertainty surrounded their future. It is estimated that the total employment in public sector enterprises from failure or rescue takeovers is at least 30,000 workers.

The circumstances of employment preservation by utilization of a public sector enterprise frequently include one or more of the following conditions.

- The enterprise is located in a single-industry community.
- The enterprise is the dominant employer in the community.
- The work force tends to be immobile, due to age, ties to the area and non-transferable skills.
- The takeover enterprise is in a contracting or mature industry.
- The enterprise is taken over suddenly in an atmosphere of crisis.

Several important concerns have been voiced about utilization of the public sector enterprise to maintain employment in such situations. In many cases the financial losses have continued for seemingly endless periods of time. There is frequently no indication of orderly movement towards a new stable situation with recog-

nized employment and financial targets. The operation may be very unstable over time as enterprise managers are torn between socioeconomic and financial goals.

The Task Force suggests that when the government takes over an enterprise it should analyze the following three stages.

- During the pre-takeover stage, the enterprise's status and the appropriateness of government ownership must be ascertained.
- During the post-takeover stage, the socioeconomic and commercial objectives must be established.
- During the restoration or dissolution state, analysis must focus on determining the eventual status of the enterprise.

To improve the effectiveness of the public sector enterprise as a vehicle for employment maintenance in failure or rescue situations, our analysis suggests the following government efforts.

- Before taking over any enterprise the three stages described above should be considered carefully. Before rescuing a private sector firm through the ownership route, it is most important to trace events through to a resolved stable state (e.g., dissolution, continuation as a public sector enterprise, return to the private sector, and so on) to determine the employment implications over time.
- To reduce the likelihood of the crisis atmosphere existing at the time of takeover, the federal government could monitor industries in single-industry communities and follow those firms in difficulty. Maintaining data on these cases could expedite the development of orderly scenarios.

If the monitoring effort reveals considerable uncertainty regarding a particular firm in a thin labour market, alternative courses of action could be planned in advance to determine the socially optimum outcome. This may be providing financial assistance to the existing private sector firm or, in the case of a non-viable operation, letting operations cease and arranging adjustment assistance. It may be possible to subsidize another firm to come into the community and utilize the labour skills becoming surplus. If takeover appears to be the most preferable route, then the full sequence of takeover events described above should be considered.

- To assist public sector managers in their difficult role of balancing commercial and socioeconomic objectives, operating guidelines could be provided. One approach that is particularly relevant from an employment standpoint is the provision of a shadow wage bill reflecting the social opportunity cost of employing workers.

How to Intervene: Thin Labour Markets

Indirect approaches to employment creation have focused to a very significant extent on influencing labour demand in geographic regions where there was excess supply. Frequently, these areas of excess supply are at the same time remote locations with smaller populations. The Task Force believes that considerable caution should be exercised in choosing the kinds of activity to be directed to these remote and thin labour markets. Many of the subsidized activities, such as high technology industries and sectors receiving export aid, can be more appropriately located in large metropolitan areas with deep labour markets. It is our belief that a careful analysis of the inherent risks associated with subsidized activities would result in improved choices of locations.

Since the mid-1960s major advances have been made in the analysis of capital investments and the implications of risk. We suggest that many of these concepts have important applications and policy implications for labour markets. The very significant demand-side interventions by governments to influence capital investment decisions in both the public and private sectors have appreciable risk implications. These capital risks have very significant effects on the benefits or costs accruing to labour.

High risk in capital investments can manifest itself in essentially two ways:

- increased susceptibility to variations in earnings; and
- increased susceptibility to bankruptcy.

Consider first the risk related to variations in earnings (“systematic risk”). Investments that are perceived as having high risk are generally correlated with high returns. For example, until the recent past the Canadian automotive industry has experienced both abnormally high returns and a high inter-year variation in earnings. Farm machinery industry earnings similarly vary appreciably with the business cycle. Consumer durables and construction activities are other examples that also fit into the high-risk, high-return category.

In contrast, low-risk, low-return industries have much greater inter-year stability in earnings. Typical examples include utilities, airlines, distilleries, food processing, transportation services, and railroads.

Given the high correlation between earnings variations and changes in the level of output, it follows that employment is less stable in high-risk, high-return industries. During a downturn, firms implement cost-cutting measures including layoffs to lower variable

costs. They may also delay capital expenditures, with employment implications. In contrast, in an upturn considerable incremental hiring occurs. These employment implications depend on whether businesses are pro-cyclical or counter-cyclical.

A second type of risk involves variations in the level and continuity of employment that are not correlated with business cycles. These latter risks (referred to as “unsystematic risks”) include a variety of factors that are peculiar to individual firms and industries and are uncorrelated with the ups and downs of a broadly diversified group of firms in the economy. Such risks include rapid changes in input prices, technology, the competitiveness of foreign firms, tariff and non-tariff barriers. For example, the automotive industry has traditionally had high systematic risk (i.e., it has been very pro-cyclical), but recently energy price shocks and environmental protection regulations have also introduced high unsystematic risk. Cane sugar producers have experienced unsystematic risk stemming from the technological breakthrough in the production of fructose from corn syrup. The Canadian forestry industry has suffered from the increased productivity of southern pine forests in the United States. The Deuterium heavy water plant encountered difficulties in introducing new technology. The Bricklin firm encountered manufacturing, marketing and management difficulties in attempting to introduce a new automobile.

“Total risk” therefore includes both the systematic and unsystematic components. It is this all-inclusive risk that is important when considering the implications for employment. Let us now consider how the private and public sectors can cope with minimizing the effects of these risks.

In the private sector it is frequently possible to cope with risk by diversification. The individual investor can reduce his susceptibility to earnings variation by investing in a larger number of firms, providing he diversifies across sectors. Investing in 20 companies would probably reduce by half the variation in earnings from investment in only one firm. Similarly, large companies can engage in conglomerate diversification or international diversification (the business cycles of host countries not being completely correlated). It may be possible to eliminate almost all unsystematic risk by investing in different lines of business in one country. Both individuals and firms can reduce systematic risk significantly by investing across countries.

In the case of the small domestic firm, however, the possibilities of diversification are frequently limited. Typically the company will have a small scope of operations in terms of both products and locations and may be

subject to both substantive systematic and unsystematic risk. In order to ensure the continuity of its operations the firm can invest in activities with low susceptibility to inter-year variations and maintain a conservative (i.e., low debt) financial position.

The most important implication of this analysis from the public sector perspective is that the potential for diversification varies with the “depth” of the labour market. That is, unsystematic risk can be reduced where firms in a diversity of industries exist in close geographic proximity. The labour market risks are lowest in the largest metropolitan centres. However, it would be desirable to locate a diversity of industries in regional centres (e.g., the Halifax-Dartmouth area in Nova Scotia) and achieve agglomeration benefits.

In small regional centres or thin labour markets, diversification possibilities may not exist. That is, the requisite economies of scale may limit the number of firms. Hence the risk reduction possibilities are restricted to choosing firms with lower systematic risk (i.e., less susceptibility to cyclical and seasonal fluctuations than the Canadian average) and low unsystematic risk (i.e., with the capability to adapt to significant changes in their environment).

This suggests that considerable care should be taken in implementing demand-side intervention policies to ensure that benefits to labour are maximized. Some of the more important suggestions are the following.

- Considerable care should be exercised in influencing the location decisions of high risk industries. Deep labour markets are more capable of minimizing the public costs associated with the risks of either significant inter-year variations or of the termination of operations.
- Efforts should be directed at deepening certain regional centres to increase stability through diversifying public and private sector activities.

Great caution should be exercised in influencing the location of economic activity in thin labour markets.

- Particularly stable industries should be chosen.
- Firms should be capable of withstanding the shocks of anticipated risks. Care should be given to enhance the firm’s financial strength, e.g., through the avoidance of high debt loads.
- Federal and provincial government activities could be decentralized and located in thin labour markets, where communications requirements permit. Progress in communications technology should enhance this possibility.

In spite of the disadvantages, it may be necessary for social reasons (e.g., maintaining a local population base)

to locate a high-risk industry in a thin labour market. Steps can be taken to reduce the risk.

- Diverse industries having very different risk characteristics (e.g., counter-cyclical with pro-cyclical; counter-seasonal with pro-seasonal) can be located together. Considerable care should be taken to ensure the transferability of labour skills between them.
- Advance planning can prepare the approaches to deal with problems in the event of significant labour dislocations. (This topic will be discussed further in Chapter Eleven on labour adjustment.)

Conclusions

Canada has had a long-standing and extensive commitment to indirect approaches to enhance the demand for labour. Until the past quarter century the primary means of intervention was the maintenance of high tariffs. Recently, there has been increasing reliance on other restrictions (e.g., bilateral quotas), incentives (e.g., cash grants, tax concessions and loan quotas), and ownership (through public sector enterprises).

Separate analyses are required to examine the efficiency and equity implications of the different forms of intervention. From the standpoint of economic efficiency, the anticipated net benefits from employment creation are modest in most cases. The Task Force concluded that the net gains from creating permanent jobs in areas of excess labour supply are not great, in the order of 10 to 15 per cent of the wage bill. In the case of creating temporary jobs (e.g., in seasonal or highly cyclical industries) there would be net costs, of up to 50 per cent of the wage. That is, Canadians in aggregate are made significantly worse off by the creation of intermittent employment.

These general conclusions clearly do not hold in all cases. Where groups such as older workers or those with special needs have particular difficulty in obtaining employment, there can be significant net benefits from employment creation.

An important asymmetry exists between the benefits of creating and maintaining employment. Other things being equal, maintaining jobs results in greater benefits than creating new jobs.

The net employment benefits are very dependent on the type of instruments utilized and the characteristics of the firms affected. We subdivided instruments into three major categories: restrictions (tariff, and quotas); incentives (cash grants, concessional loans, tax concessions, and so forth) and ownership (public sector enterprises). Our analysis of restrictions suggested that the

recent reliance on bilateral quotas may be the most costly means of protecting a limited amount of employment. In analyzing alternative incentives, the Task Force suggests that there are many reasons for favouring the use of cash grants. They can be directed at a target group of workers; they can be of value to a high fraction of the universe of firms; and they are not as susceptible to leakage abroad as some other approaches (e.g., tax concession). The public sector ownership approach to maintaining employment has frequently encountered problems. These difficulties have most often arisen because the medium- and long-term goals for the enterprise were not established at the time of takeover. Managers of these firms face considerable problems in attempting to fulfill simultaneously commercial and social goals.

The Task Force concludes that there is a need to consider seriously the type of labour demand that is

created in thin labour markets. Most important is the provision of stable jobs. Hence there is a need for low-risk firms, those which are not highly susceptible to seasonal and cyclical variations and to insolvencies. Stable private sector industries and, where feasible, government activities are best suited to these markets.

This chapter benefited from several reports prepared for the Task Force. For a discussion of the economic efficiency implications of intervening in labour markets, we relied on the concepts in the paper by Arnold C. Harberger, "The Social Opportunity Cost of Labour: Problems of Concept and Measurement as seen from a Canadian Perspective." Our discussion of the implications of various incentives of the corporation relied on the report by D.R. Lessard, C.Y. Baldwin and S.P. Mason, "A Methodology for Evaluating Financial Incentives to Create Employment." An overview of the implications of quotas relied on research by Glenn P. Jenkins. The presentation of decision-making in private sector firms was based on a report by Donald G. Tate, "Government Assistance and Corporate Investment in Canada." The discussion with respect to public sector enterprises as agents for employment retention relied on the concepts in the report by Robert W. Sexty, "Public Enterprises and Employment in Canada."

Chapter Eight

Influencing the Structure of Demand for Labour: Direct Employment Programs

Direct employment programs have generated considerable confusion over time as to their purposes, their relevance and particularly their place in the overall framework of labour market policy. Job creation programs have been delivered to areas of seasonally and chronically high unemployment as well as those experiencing a cyclical downturn, irrespective of the need to respond with unique instruments for diverse situations. Experience has demonstrated their usefulness in certain markets, but their applicability as a multipurpose tool to tackle unemployment is seriously questioned by the Task Force. The need to distinguish between generating jobs for a defined period and delivering a fiscal stimulus is crucial.

As Chapter Seven has outlined and this chapter will emphasize, the simple fact of establishing job creation programs may have as many negative implications as positive ones if the nature of the labour market context is not precisely determined. Tailored labour market policy responses of a long-term or a shorter-term type must be fitted to specific market needs. The need for a long-term development orientation raises the question of how government can best provide the kinds of support required. Experiences has indicated certain limitations which the Task Force feels will need to be recognized in future proposals. This chapter traces the history and evolution of these programs and their implications for labour market policy in the 1980s.

The Development of Job Creation Programs

In Canada, direct job creation measures have been a recognized feature of government policy since the 1930s. The Relief Camp/Job Corps approach and “back to the land” programs characterized government responses to the Great Depression. Direct job creation, largely financed and managed by the public sector, later reappeared in a different form in the early 1950s as the municipally delivered, federally funded Winter Works programs. The strong economic recovery in 1961 result-

ed in virtually no direct job creation activity during a good part of that decade.

Present employment development policies and programs reflect the directions established during the late 1960s and early 1970s. The 1971-1981 decade represents a unique period in the history of Canadian employment policy, characterized by involvement of individuals and local groups in a massive job creation effort encompassing both social and economic objectives. During this time, the traditional focus on policies to affect the supply of labour was broadened to include programs affecting the demand side of the labour market. Federal direct job creation programs in Canada were innovative not only nationally but also in the international sphere. They stressed involvement from the grassroots level of those finally affected, such as youth, Native people, the disabled, etc. Programs were designed to fund community initiatives rather than the traditional, more rigid top-down approach exemplified previously by Job Corps, Winter Works and other make-work schemes.

The introduction of direct job creation programs was made in a social, economic and political climate which was conducive to the active participation of government and the citizenry in an area traditionally left to the operation of the market and to broad-brush macroeconomic government policies. Several factors which contributed to this climate can be identified.

- The legacy of Keynesian economics suggested that governments could and should play an active role in sustaining a critical level of demand.
- Discretionary spending by the federal government increased significantly. The proportion of federal funds expended on defense and statutory programs declined sharply, while expenditures for health, welfare, social security and economic development steadily rose.
- Average national unemployment rates rose from 4.4 per cent in 1969 to 6.2 per cent in 1971, as shown in Table 8-1. This was perhaps the most immediate factor leading to the increased use of direct job creation programs.

The origins of the direct employment programs of the early 1970s can be traced to a renewed commitment to social justice and the equity objectives of a "just society." These early initiatives came from the Department of the Secretary of State and not from manpower policy sources. Concern about the entry of massive numbers of youth into the labour force prompted the development of constructive short-term employment opportunities. Additional measures to reduce unemployment in chronically affected areas grew out of governmental concerns of a social policy nature. Job creation initiatives exhibited the multiple objectives of equity considerations, short-term responses to unemployment rates and longer-term concerns regarding absorption of the "baby boom" cohorts into the labour force. Measures to combat youth unemployment were continued through the economic upswing of the 1972-1974 period. Such programs combined the equity objectives of the government with a short-term stimulus to the economy, especially in areas experiencing chronically high unemployment.

These broad objectives were pursued through measures to stimulate increased labour demand for specific groups and to increase jobs generally in high unemployment areas. Secondary objectives included producing a more equitable income distribution and contributing to social or community betterment. A conscious effort was made to maintain as low a rate of inflation as possible, through wage payments at the minimum level. The difficulties associated with these multiple objectives and the benefits accruing from the last decade of Canadian job creation experience are assessed later in this chapter.

While the federal government led the way with the most extensive budgetary commitments to such programs, most provinces undertook similar job creation measures of the short-term variety. Linkages between the two levels of government in this area evolved throughout the 1970s and remained ad hoc and province-specific. Both federal and provincial programs became increasingly complex and sophisticated, with greater differentiation between programs aimed at seasonal, cyclical and structural unemployment. There is no evidence of job creation programs undertaken and funded by municipal governments, although some municipalities acted as delivery agents for some federal programs.

The Target

Job creation program design in the early 1970s illustrated the problem of multiple objectives and the government's limited comprehension of the nature of the unemployment phenomenon, all of which were reflected in the confusion over how to assess these initiatives. Establishment of the Opportunities for Youth Program (OFY) in March 1971 and of the Local Initiatives Program (LIP) later that year illustrated the nature of the basic confusion. The 1971 OFY Program not only created 27,800 summer jobs for young people. It also gave participants an opportunity to work on non-profit projects of a meaningful nature, to test some of their aspirations, to develop skills and to contribute to the "social fabric of their communities." Thus, criteria for success included youth involvement, innovation, commu-

Table 8-1
Canada Labour Force: Unemployment Data (annual average)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Labour force															
Both sexes; 15 years and over (000's)	7,493	7,747	7,951	8,194	8,395	8,639	8,897	9,276	9,639	9,974	10,206	10,498	10,882	11,207	11,522
Unemployment															
Both sexes; 15 years and over (000's)	251	296	358	362	476	535	553	515	514	690	727	850	911	838	867
Unemployment rate															
Both sexes; 15 years and over	3.4	3.8	4.5	4.4	5.7	6.2	6.2	5.5	5.3	6.9	7.1	8.1	8.4	7.5	7.5
Unemployment rate															
Both sexes; 15-24 years	5.6	6.5	7.7	7.5	10.0	11.1	10.9	9.6	9.3	12.0	12.7	14.4	14.5	13.0	13.2
Unemployment rate															
Both sexes; 25 years and over	2.6	2.9	3.4	3.4	4.2	4.5	4.6	4.1	3.9	5.0	5.1	5.8	6.1	5.4	5.4

Source: Statistics Canada, *Labour Force Survey*.

nity benefit and number of jobs created within strict budgetary limits. LIP was not limited to youth but had almost identical success criteria. Both programs stressed labour-intensive activity. Support for non-wage project elements such as physical and financial capital was minimal, with the result that the longer-term impact on the social and economic infrastructure of communities was low.

The Economic Council in a 1976 report raised questions about the confusion of targets and goals in federal job creation programs: "Is the main goal of such programs the creation of employment or the meeting of perceived social needs? Are they to be fitted to the individual employed or vice versa?" Most of the programs were variations of the original LIP and OFY concepts with new name tags and updated terminology. Over time, the administration of programs became more decentralized, with emphasis on rural areas and disadvantaged groups, and Members of Parliament were increasingly consulted for their views in the final stage of the selection process.

The level of unemployment in each area became more and more the trigger for and the measure of allocation of funds. The launching of LEAP in 1973 began the trend towards involvement of the chronically unemployed and the beginnings of a concern for the creation of long-term jobs situated in small entrepreneurial settings, "long term" being defined in the mid-1970s by a jump in project funding from one year to three-and-a-half years. LEAP preparation projects, a training vehicle for the chronically unemployed, were initiated as the need for more than just jobs became evident. By the 1980/81 fiscal year, the anticipated expenditure figure for LEAP had jumped to \$65.2 million from \$5.4 million in its first fiscal year of operation in 1973/74.

Over the past decade, the stated objectives of the job creation programs have increasingly stressed "developmental" aspects, but the nature of the programs has not significantly evolved. The focus has continued to be the initiative of individual organizations carrying out relatively short-term activities with a non-profit or non-competitive restriction and with a labour rather than capital utilization goal.

The 1980 announcement of the Local Economic Development Assistance (LEDA) program merits separate attention because although it retains some elements of previous programs, such as a non-profit limitation, it represents a further effort to work around existing constraints in an experimental manner.

In summary, the job creation programs begun in the 1970s started with a concern for seasonally unemployed youth and evolved into a counter-cyclical effort to assist areas of chronically high unemployment. For the most part, these programs were designed and considered as short-term measures to reduce unemployment in periods of temporary downturn in the economy. A realization of the need to deal more effectively with structural problems of the disadvantaged or chronically unemployed led to later inclusion of more elements of training and a longer time frame, and programs gradually became quasi-permanent features of labour market policy. Aspects of most job creation programs have touched segments of seasonal, cyclical and structural unemployment, with poorly defined targets. This has seriously limited the impact and effectiveness of the programs.

The political rationale for direct job creation rests on two further factors which have also limited the effectiveness of job creation program design. The first is that some of the appeal of job creation stems from frustration over the apparent failures of early labour market programs in the late 1960s, such as training and education for the unskilled, to correct supply-side deficiencies. The second factor is that increasing public dissatisfaction with growth of the income support system and the hint of linking welfare with some work requirement led policy makers to place more emphasis on fitting individuals into a job slot and less on the value of their output. These political considerations are discussed by Haveman (1980).

During the past nine years (1971/72-1979/80 fiscal years, inclusive), some \$2 billion was spent on federal direct job creation programs, exclusive of tax expenditure programs and other private sector-oriented employment incentive measures such as the Job Experience and Training Program. About 260,500 person-years of employment were created, at an average cost of \$7,500 per person-year.

The major portion of these funds, almost \$1.5 billion, was used to support short-term employment created under LIP and the Canada Works Program. About \$350 million was spent on summer youth-oriented programs and about \$175 million on programs with explicit longer-term objectives, such as LEAP and the Economic Growth Component of Canada Works. (See Table 8-2 for details.)

The Impact

Any assessment of the effectiveness of direct job creation measures in the last decade is hampered by a score of unresolved issues, such as agreement on global objectives, macro or micro level goals, targeting and evalua-

Table 8-2
Direct Job Creation

Expenditures by Fiscal Year				Person Years/Expenditures by Program Year			
Fiscal year	Program	(\$000) ²	Average unemployment rate	Program	Cycle/program year	(\$000) ²	Person-years created ²
1971-72	Opportunities for Youth	23,118	1971 6.2%	Opportunities for Youth	1971	23,118	5,800 (estimated)
					1972	31,072	7,300 (")
					1973	35,856	9,100 (")
	Local Initiatives Program	83,716		average cost per p/y:	1974	26,257	5,488 (contracted)
		106,834		\$4,273	1975	32,299	7,089 (")
						148,602	34,777
1972-73	Opportunities for Youth	31,072	1972 6.2%	Local Initiatives Program	1971/72	182,805	14,907 (from f/y data)
					1972/73	192,501	34,492 (contracted)
					1973/74	67,620	11,899 (")
	Local Initiatives Program	195,047		average cost per p/y:	1974/75	79,894	11,869 (")
		226,119		\$7,375	1975/76	128,320	17,774 (")
					1976/77	177,183	21,375 (")
						828,323	112,316
1973-74	Opportunities for Youth	35,856	1973 5.5%				
	Local Initiatives Program	142,874		Canada Works	Cycle I (1977)	108,019	12,593 (contracted)
				average cost per p/y:	Cycle II (1977/78)	212,644	23,901 (")
				\$9,130	Cycle III (1978/79)	168,138	18,203 (")
	Local Employment Assistance Program	5,372			Cycle IV (1979/80)	96,253	9,379 (")
		184,102				585,054¹	64,076
1974-75	Local Initiatives Program	82,683	1974 5.3%	Young Canada Works	1977	43,665	5,542 (contracted)
				average cost per p/y:	1978	42,469	5,622 (")
				\$7,844	1979	53,179	6,596 (")
	Local Employment Assistance Program	11,802				139,313	17,760
	Opportunities for Youth	26,257					
		119,742					
1975-76	Local Initiatives Program	123,908	1975 6.9%	Local Employment Assistance Program	1973 — March 31, 1980 (Source: LEAP Program)	144,602	11,960
	Local Employment Assistance Prog.	13,291		average cost per p/y:			
				\$12,090			
	Opportunities for Youth	32,299		Summer Job Corps	1977	8,500	1,378
					1978	11,500	1,378
	Community Employment Strategy	594		Youth Job Corps (subsumed Summer Job Corps)	September 1978 — March 1980	43,494	5,280
		170,092				63,494	7,817
1976-77	Local Initiatives Program	175,429	1976 7.1%	average cost per p/y:			
				\$8,123			
	Local Employment Assistance Prog.	13,974		Economic Growth Component of Canada Works	1978/79	28,410	3,163
					1979/80	16,481	1,974
						44,891	5,137
1977-78	Community Employment Strategy	1,329		average cost per p/y:			
		190,732		\$8,739			
	Local Initiatives Program	37,230	1977 8.1%	Community Employment Strategy	All years	5,896	n/a
	Local Employment Assistance Prog.	19,023					
	Canada Works Prog.	218,819					
	Young Canada Works Program	43,608					
	Summer Job Corps	8,500					
					TOTAL	1,960,175	260,524

Table 8-2 (continued)

Expenditures by Fiscal Year			Person Years/Expenditures by Program year				
Fiscal year	Program	(\$000) ²	Average unemployment rate	Program	Cycle/program year	(\$000)	Person-years created
1978-79	Community Employment Strategy	1,654					
		328,834					
	Local Employment Assistance Prog.	24,117	1978 8.4%				
	Canada Works Program	210,637					
	Young Canada Works Program	42,541					
	Summer Job Corps	11,500					
	Economic Growth Component	28,410					
1979-80	Community Employment Strategy	2,319					
		319,524					
	Local Employment Assistance Prog.	48,240	1979 7.5%				
	Canada Works Program	117,434					
	Young Canada Works Program	53,351					
	Youth Job Corps	46,900					
	Economic Growth Component	16,481					
	282,406						
	TOTAL	1,928,385					

¹Represents expenditures to January 1981; total at March, 1980 which would correspond to years represented by fiscal year was about \$540,434.

²Figures in bold represent subtotals and totals.

Source: Financial Management, CEIC (Fiscal year expenditure reports and program status reports).

tion methodologies. In spite of these limitations, a spectrum of opinion does exist which, when considered in its totality, may assist us in planning for the 1980s. Consideration of this topic will be attempted from two different perspectives — one short-term and the other longer-term and more fundamentally developmental.

The absence of a framework for reviewing the nature and impact of direct employment measures has hampered efforts to improve their usefulness. Chapter Seven has provided an insight into the importance of the social opportunity cost of labour and the characteristics of a thin or deep labour market, both aspects important in any consideration of job creation program relevance or effectiveness. To apply these concepts to assess the appropriateness of employment development initiatives aimed at a more effective use of underutilized resources also requires a sense of the existing economic situation

in a particular community. Problem areas such as those affected by a cyclical downturn with an anticipated recovery, or thin labour markets where the social opportunity cost of labour is low, may call for "holding tank" expenditures. Preference could be given in the case of seasonal unemployment to diversion of certain public expenditures into the off-season. Additionally, in those situations where individual opportunity costs are low and a deeper labour market exists, improvement in individual productivity through training and sheltered workshop projects should be an objective.

A further context requiring a different strategy would be one in which a community had suffered a major reduction in demand but might nevertheless be able to generate new productive employment. Here adjustment measures aimed at retaining some workers in place, upgrading the skills of others to prepare for the upcom-

ing new jobs or for relocation to a new area are appropriate. Deep labour markets would be more susceptible to these supply-side strategies.

Long-term developmental approaches are required for communities in slow growth or undeveloped areas in thin labour market environments which are heavily dependent upon transfer payments and are often characterized by low opportunity costs of labour. A comprehensive development approach is proposed later in this chapter for such communities or groups where capacity building and increased demand are essential to a more productive future.

In these situations, job creation programs have had widely differing impacts. The similarities between some of the community and individual target areas complicate the task of program assessment but a 1980 OECD report on *Direct Job Creation in the Public Sector* succinctly put the issues into context by indicating that programs can be categorized by their stated intentions of facilitating seasonal, cyclical or structural adjustment, even though their target populations are hard to differentiate. This categorization provides a touchstone in evaluating the effectiveness of each program in serving its intended recipients.

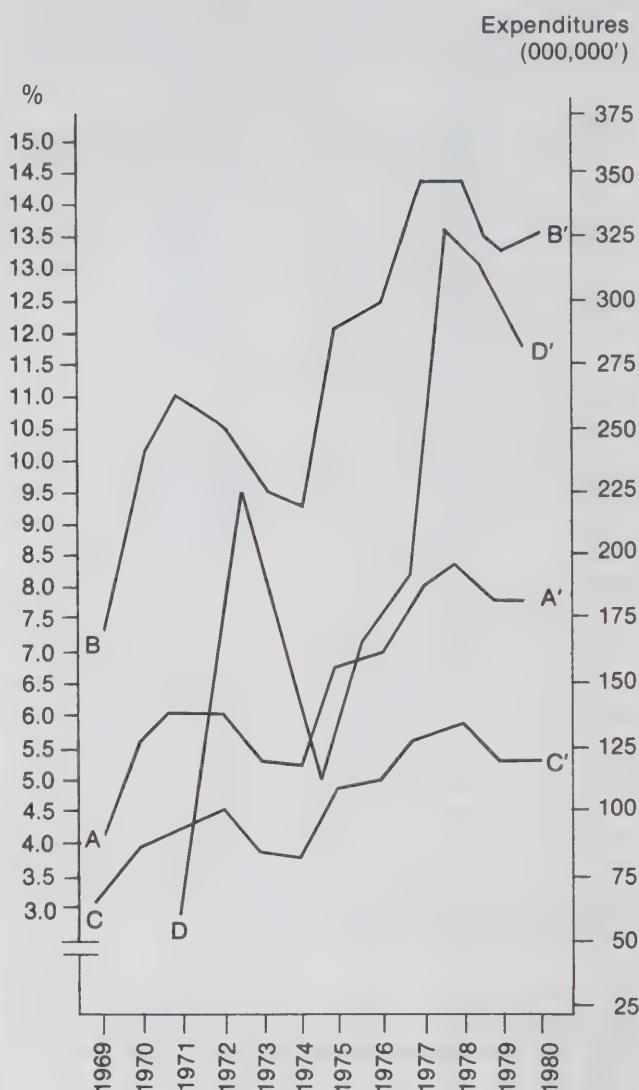
The first example noted, where a low opportunity cost for labour exists, is one in which the "holding tank" objectives of job creation programs have been successful. It is clear that as short-term job generators, direct job creation programs have succeeded in producing many jobs, rapidly, with effective geographic targeting and building on some local involvement. The value of their output is open to question, as is their relevance to the barriers faced by women. Figure 8-1 does show their responsiveness to the unemployment trends.

Direct job creation as a counter-cyclical measure should be capable of fast phasing in and out, be very labour intensive, have very low displacement effects, and draw only from the unemployed. Community situations requiring responses of a training type are not well served by present job creation programs. Evidence indicates that little training takes place and limited, if any, longer-term capacity building is encouraged. At most, \$175 million of \$2 billion spent from 1971 to the present has had capacity-building potential and, as later sections will show, longer-term development has happened more by accident than by design of past job creation programs. If a counter-cyclical program must also be targeted in favour of disadvantaged workers, speed is likely to be decreased and it will therefore be less effective in terms of its primary goal of job creation.

Conversely, speed in and out is not crucial and phasing out may not be planned in programs aimed at areas

Figure 8-1

DJC Fiscal Year Expenditures; Unemployment Rates 1969 to 1980



A-A' Unemployment Rate: Both sexes; 15 years and over.
 B-B' Unemployment Rate: Both sexes; 15 - 24 years.
 C-C' Unemployment Rate: Both sexes; 25 years and over.
 D-D' Fiscal year expenditures for direct job creation.

Source: Statistics Canada, *Historical Labour Force Statistics*, Cat. No. 71-201 and Financial Management, CEIC.

of chronically high unemployment. There is no reason why these programs should be restricted to non-profit operations or should be labour intensive. Capital-intensive industries will generally introduce greater stability and a longer-term benefit to the chronically underemployed or unemployed, since programs involving sizeable

capital investment are far less likely to be abandoned in an economic downturn. Self-sustaining initiatives may be expected to require training on the job, resources and access to various forms of capital. The OECD report on direct job creation notes that attempting to serve the seasonally, cyclically and structurally unemployed through a single approach or program is most probably counter-productive. It recommends distinct programs for each objective or target.

Reports by the Economic Council and the OECD are useful with regard to some details of the distinctions highlighted above. The Economic Council Reports of 1974 and 1976 noted that LIP participants were mostly either people experiencing difficulty finding or retaining stable employment or persons drawn into the labour force on a sporadic basis, such as homemakers, retired persons and students. Almost all of the 238,000 short-term jobs created during that program were subsequently terminated and participants fell back on government income support — UIC, social assistance, CMTP allowances, or some combination of these resources. It is evident that job creation projects generally hire participants who alternate between project employment, low paid private sector employment, training courses, social assistance and unemployment insurance benefits or who are not normally in the work force. Direct job creation adds one more element to the temporary labour market but does little to break down barriers to higher paying or more skilled jobs. The Task Force concurs with the view that direct employment projects do not constitute stepping stones to regular productive employment for most of those employed on the projects or those remaining outside the labour force.

Indications such as these gave rise to more careful attempts to target programs on the disadvantaged and the geographically isolated. Under Canada Works, for example, longer-term projects and more generous and varied capital allowances were established. Other programs such as entrepreneurial LIP, the Economic Growth Component of Canada Works, CES, and LEDA stressing developmental aspects were introduced on an experimental basis. The growth of LEAP and the more recent Community Economic Strategy (CES) experiment (1975-78) provide evidence of the further search for more precise targeting on the chronically unemployed and concern for the lessening of their dependence on government. These types of programs drew applicants from the ranks of the seasonally, cyclically and chronically unemployed and drew some discouraged workers back into the work force.

A Program Framework

The OECD report on *Direct Job Creation in the Public Sector* (1980) noted that Canada Works, which had

been initiated to counter seasonal and regional unemployment, became a year-round program to counter unemployment in general. The Young Canada Works program was designed to respond to seasonal factors by providing summer employment, but also had a structural orientation since it was only open to students. The report's conclusion was that with the exception of LEAP, many counter-cyclical programs have structural elements and certain structural programs have counter-cyclical aspects or are simply responses to continuing high levels of unemployment in general. It further stated that these different elements often conflict with each other, reducing significantly a program's ability to effectively accomplish any of its goals. Other issues of displacement, leakage, costs and productivity of the worker require consideration within the second perspective — the longer-term focus.

A longer-term perspective is that of viewing unemployment in the context of development of people and communities towards greater self-sufficiency. While recent programs have espoused such developmental objectives and reflected them through revised criteria, they have not provided a commitment to a long-term (beyond three years) plan or a support system to ensure the fostering of all elements of development. In addition, the requirement that most projects be non-profit in nature has frustrated attempts to promote self sufficiency. Restrictive departmental mandates have tended to compartmentalize resources and programs, and genuinely committed program managers have been hamstrung by these restrictions. The overall result has prevented emergence of longer term strategies that would aid those caught in the web of unemployment and disadvantage.

In evaluating the cost of public sector job creation as compared to stimulating private employment through the use of general tax cuts or public expenditure, we have used OECD data and a study by Robert Haveman (1980), as well as our own estimates. All these confirm the lower cost of public sector job creation. The average person-year cost of job creation is approximately \$8,000 by OECD estimates, \$6,000 to \$10,000 by Haveman and \$7,500 by Task Force estimates. These may be compared to an average person-year cost of about \$20,000 by OECD estimates for jobs created via general tax cuts or public expenditure increases, up to the \$30,000 we have estimated through quotas and other forms of trade restrictions. In addition, direct job creation permits more effective targeting. All studies agree that direct job creation is also less costly in terms of the inflationary impact if careful targeting on the disadvantaged is maintained and wages are low.

The Task Force has identified a number of different circumstances where the social opportunity cost is low

and some form of direct employment or development approach is appropriate. It is clear that as a departure from past practice, each type of unemployment calls for a distinct response and that individual programs or agencies cannot tackle the complexity of unemployment situations. Individual program responses should have limited and defined objectives, in contrast to the loading of multiple objectives onto job creation initiatives.

Labour market policy must distinguish in future between labour market areas experiencing chronic high unemployment and those being affected by a cyclical downturn. Direct employment approaches must take into account the unique nature of each market situation. Several causes can be identified: seasonally based economies, those economies affected by declining industry situations, and those instances where the economic resources of the community have disappeared or have not yet been tapped.

Traditional program responses to the problem of seasonal unemployment have involved annual injections of job creation funds. Future efforts will need to be longer term, to focus on changing the characteristics of the market. Chapter Seven explores the potential for developing more industry geared to the off-season, as well as ways of extending the length of seasonal jobs. Community-based development strategies, outlined later in this report, are another means of strengthening the economic base of a community. Government expenditures should be planned to maximize off-season employment in designated areas with a regular pattern of seasonal unemployment. Budgeting procedures should incorporate this seasonal reality, replacing the present ad hoc project approach. The main objectives for these expenditures would be to hold workers in the community and to use them as productively as possible in the off-season.

Unemployment due to adjustment caused by declining industries must also be addressed in a specific fashion. The Task Force is convinced that this problem also requires a long-term adjustment strategy encompassing renewed business growth in the community to increase demand for labour, as well as training and mobility initiatives to reorient the labour force to anticipated areas of demand. The characteristics of such programs should be developmental, targeted, and training-oriented, with an emphasis upon capacity building.

Areas experiencing chronically high unemployment caused by the disappearance of their economic base or the lack of development of their potential fall into a category needing a long-term developmental approach. They require an ongoing commitment of development resources for an extensive period of time with a clear

mandate to tackle difficult circumstances. Support needs to encompass elements of funding, training and supervision, and above all community-level capacity building. Job creation measures have failed thus far to tackle the situation of disadvantaged rural and urban people, a majority of whom are not participating actively in the labour force. A strategy for comprehensively approaching this constituency of people will be recommended later in this chapter.

Distinct from the longer-term unemployment problems identified above is the situation posed by cyclical unemployment during an economic downturn. In dealing with this situation, the question is the extent to which the tools of macroeconomic policy are to be used. Given a decision that fiscal expansion is desirable in the light of competing objectives, notably that of price stability (as discussed in Chapter One), one of the tools available to deliver a stimulus is a job creation program. Federal funding of job creation could support initiatives planned by all levels of government or by individual organizations.

A public service employment program could be of particular utility if certain national priorities were designated to use this labour force. All levels of government could undertake initiatives in areas of particular priority which have longer-term productive spin-offs (i.e., renewal, etc.). The size of such a temporary counter-cyclical measure and its area application would depend upon whether the downturn was confined to a particular region or affected the country as a whole. Such job creation program funding would need to be mounted on a much more substantial scale than any undertaken to date if it is to have a significant macroeconomic impact on the economy.

One further important factor relates to the general public perception of direct job creation programs and in particular the attitude of those special interest groups most severely affected by intermittent or low participation in the labour force. In the absence of other measures to alleviate immediate economic suffering, short-term, direct job creation initiatives are essential. However, the public is increasingly aware that these programs are only short-term measures and is demanding more permanent employment solutions. Programs which have stressed community betterment, youth and disadvantaged group involvement, and non-profit enterprises or services are accepted as necessary to weather a short-term situation, but not as ends in themselves. Job generation in the private sector is recognized as a more lasting solution. Yet evidence has accumulated to indicate that neither direct job creation by the public sector nor stimulation of employment in the private sector is adequate to meet the needs of the severely unemployed.

These individuals and groups, although comprising only a fraction of the total working-age population, are noteworthy for the rising economic costs of their maintenance, the wasted resources they represent, and the political sensitivity of their situation.

The major policy dilemma in designing job creation programs is whether to regard employment and employment programs as ends in themselves or to situate these initiatives in the more global context of the long-term social and economic development of the individual within the community.

It is the contention of the Task Force that a wider, more global development approach is essential for the future, and that direct employment policy must be tailored to meet not only short-term goals but also broader, longer-term development objectives. Our view is not that past investments were a mistake but that future efforts can build upon recent experience, new conditions and the evident needs. They must go well beyond simple creation of jobs and must aim at the development of communities within which individuals may thrive.

Employment with/without Development

The necessity for capacity building at the local level has been the important missing factor in past efforts. The development of internal community skills to generate and support local development through effective planning, management, financing and other methods is the essence of the vital capacity-building element. As earlier chapters have outlined, the rationale for a "holding tank" orientation, keeping workers employed while waiting for future opportunities, will be increasingly challenged by an industrial sector which is experiencing labour shortages, by a society which must bear the escalating financial burden of seemingly ineffective support measures, and by the unemployed themselves, particularly by groups experiencing the most severe employment problems. The building of a capacity to plan, manage and develop at the local level is not a substitute for normal worker emigration. It is complementary as it will help some communities survive as more viable economic entities while at the same time better equipping some segments of the population for a choice. Their involvement in local capacity-building efforts can only extend the nature of their options and the potential for their successful transition, whether in or out of their home communities. The Economic Council's study of Newfoundland (1980) stresses the strong desire of unemployed workers to find work. Newfoundland workers expressed a preference for self employment and for jobs in their home area. Similar indicators can be found

in other areas and provide the basis for looking for additional approaches.

These ideas are not new or untested, as noted in studies by the Department of Manpower and Immigration (1975) and the Canadian Council on Rural Development (1978), as well as a recent statement by David Sachs (1980), Director of the National Commission for Employment Policy in the United States, which all support an investment approach to the problem of severe unemployment rather than a "holding tank" approach. In this report we have already outlined means of upgrading the presently employed and bringing about increasing labour force participation, particularly among disadvantaged groups. Facilitating more productive use of potential skills through investment in training, job redefinition, progressive employment practices and a more strategic industrial policy will benefit a large segment of the working population and the more viable economic enterprises.

A new *mix* of tools and associated programs is being advocated, after clarifying objectives, with a new melding or *fit* of development programs into a more coherent global context encompassing not only economic objectives but broader social and community goals. Development may be defined in terms of the ability of people to be self reliant, assert their autonomy and carry out activities of interest to them. In the international setting, both the theory of development and the practice of economic assistance have not taken adequate account of political and cultural considerations. Development has been defined in terms of things to be attained by capital accumulation, infrastructure building, management training and the like. These must instead be recognized as means to an end, with improving the well-being of people as the ultimate goal of economic development.

Current development theories and experience, especially when directed at disadvantaged groups and isolated or underdeveloped communities, provide a substantive basis on which to reconstruct our present policies, programs and delivery mechanisms. Experience in Canada and abroad is sufficient to permit the formulation and implementation of development initiatives with which to make a quantum jump into a qualitatively new generation of undertakings. Many existing programs have paved the way.

A lack of resources may well not be the problem, as existing programs have substantial funds. UI benefits paid during 1979 were \$4.7 billion; DREE's outstanding sub-agreements totalled \$3.7 billion during the past decade and direct job creation expenditures have totalled approximately \$2 billion during the past decade. The Task Force will not be advocating the provision of

new resources, but a redirection of resources from a short-term "holding tank" policy to a more development-oriented approach.

Job creation activities have frequently assumed a far greater ability to plan and manage than existed at the community level. When skills and organizational capacity at the community level were not sufficiently developed to sustain the management requirements of projects, either the project continued with inadequate guidance or field staff provided the needed skills. Rather than working to develop local skills and capacities in a systematic way, government response to this problem tended either to tolerate lack of competence or to foster dependence.

Co-ordinated action by all departments concerned with development has not been seriously attempted. Awareness of plans and programs in other departments is not enough to yield the concerted actions required for development. Furthermore, mandates are poorly aligned with reality. CEIC is limited by its mandate to dealing with its clientele in terms of labour supply and demand, while DREE can deal with the full range of social and economic aspects in "poor" regions. However, DREE cannot deal with matters assigned to other federal departments, and this limitation prevents it from dealing with the many essential requirements for development. DIAND has a much broader development mandate for Status Indians, but an appropriate mandate is not a panacea; implementation which supports the process of development is equally important. IT&C's clientele is the profit-making sector and although these actors play an important role in the development process, they are not normally sufficient in themselves to stimulate and sustain the development process in areas of chronic high unemployment.

The collection of programs evinces design gaps and operational problems in matching programs with the requirements for development. For example, short-term programs such as job creation, while useful in some circumstances, tend to foster a dependency upon both services and jobs created by projects. Community groups and elected representatives lobby for prolongation of the project and further injections of funds into the area irrespective of the actual contribution of the work to the needs of the community as a whole. In some communities, job creation projects have involved construction of "white elephant" recreation facilities without sufficient consideration of future needs for operation, maintenance

and upkeep. Bureaucratic imperatives such as the need to move large amounts of money quickly and establish prescribed, preplanned program procedures and schedules further remove programs and their staff agents from any real potential to undertake substantive development, especially in underdeveloped areas or in aid of disadvantaged groups. Notwithstanding these observations, the contribution made by shorter-term programs cannot be denied, nor should the norms of today and tomorrow be applied without qualification to past programs.

There are some inherent limitations in government institutions relevant to contemporary development trends. Fundamental development work with the disadvantaged requires as a prerequisite continuity of commitment to an undertaking and comprehensiveness in approach. The size, administrative procedures and departmental competitiveness of government as well as the demonstrated incapacity to co-ordinate and respond appropriately to community requests, particularly of a complex, multidimensional nature, have impeded this process.

Other programming, such as Special ARDA and other economic development programs, also make assumptions about the capacity of the community to support the efforts of an individual entrepreneur. These programs tend to assume that management skills are possessed and that the expectations of the community will reinforce the success of an economic development project. Success expectations of the community are often framed in terms of "jobs" whereas success in terms of program expectations is "economic viability." Community pressure is exerted on the board of directors to provide employment in the community, and the board ends up hiring more workers than can be viably supported by a project.

The consequence of these approaches has been to foster community dependence and the loss of public confidence in job creation and economic development programs. People believe that they can undertake development activities better than government can. Increasingly this premise is used in designing programs to assist the private sector — it is time to invest similarly in the long-term future of disadvantaged peoples and communities in Canada. Direct short-term measures by government have not significantly improved their situations. Private sector activity is unable to intervene alone — additional instruments are required to improve the mix of programs and to assist in making them fit.

Policy Directions for the 1980s

New conditions argue for innovation. Experiences of the 1970s in Canada have provided many insights which may contribute significantly to the design of new development approaches for the 1980s. The long-range development implications of current government programs, particularly direct job creation initiatives, include some foundations upon which to build and some ways of taking the important step of linking short-term efforts with longer-term objectives and programs. Most of these programs were designed to serve short-term objectives, but many can also contribute to development.

The Task Force has identified a range of long- and short-term uses of job creation resources, outlined later in this chapter. Consistent with its conviction that employment must be viewed within the global context of development, the Task Force has identified several important trends relevant to future policy development in this area. Rather than simply describing these directions, it has utilized existing experience to formulate a conceptual framework for development of undeveloped areas or disadvantaged sectors in the 1980s to complement other economic initiatives in Canada. The following concepts are built around a community-based approach, a development system framework and a results-oriented performance path. A detailed Task Force paper (Brodhead, Svenson and Decter) outlines more thoroughly the concepts briefly summarized in the following paragraphs.

A Community-Based Approach

The focus of community-based development is on the greater use of underutilized local capacity through more productive use of the existing labour force and increased local opportunities in slow growth areas, both urban and rural. This approach complements the myriad of industry-oriented and regionally directed development programs. Experience in Canada to date leads logically to a community-based orientation, which builds on the basic organizational work of the last decade in Canada and responds to the need for a developmental approach. In the United States, community-based programs are the sole successful survivors of the Office of Economic Opportunity undertakings in the 1970s.

A working definition of community-based economic development would be the creation or strengthening of economic organizations controlled or owned by the residents of the area in which they are located or exert primary influence. The process has usually been guided by an umbrella organization, sometimes known as a community development corporation (CDC), which may have the characteristics of a non-profit holding company

owning profitable entities and also operating non-profit social service organizations. The central goal of community-based development is to increase the power and influence of the disadvantaged by providing economic strength for a representative community organization.

In speaking of community-based development, we are including many kinds of communities. A town, region or neighborhood, with or without formally defined boundaries, may be a suitable site for an area-based effort to achieve economic improvements. Or the sense of community purpose may stem from a particular interest group within an area. What is essential is a generally homogeneous pattern of economic need and a perception of a shared situation on the part of community members.

A recent OECD report (November 1980) refers to this process as the emergence of a "third sector," which is defined as follows:

a meeting of new or unmet demands at the local level through a partnership of public, community and private organizations. In its widest sense, therefore, it can be seen as a form of sub-contracting by governments to finance a particular set of unmet needs in a community.... Not all third sector activity involves the provision of social goods or services. There is also a potential to foster, through "seed-money," small-scale economic enterprises...where revenues from economic activity will be used to finance social services. (p. 59)

Community-based economic development policy requires a framework of institutional support, enabling legislation and infrastructure. It involves the sequential building of a local capacity to plan and manage, complemented by a national support network of institutions and graduated funding related to development stages and performance standards. The focus is on global stimulation of the community rather than support for the individual entrepreneur. This requires a team effort by local interest groups, industry and public officials to mobilize community initiative and resources toward long-term development objectives for the particular benefit of the disadvantaged or underdeveloped. The team approach provides a mechanism to consolidate public and private resources to create jobs and income for community needs, with greater local self-sufficiency as a primary goal.

The local vehicle, established as a public/private partnership of community people, industry and elected representatives, serves many roles, chiefly to identify potential labour demand and link it with labour supply in the community, and to provide a focal point for a social and economic perspective of the community.

Capacity building must be at the core of any new development thrust. Community-focused capacity building implies building the base needed to sustain long-term economic growth and a healthy society.

This approach to development builds on Canadian job creation during the 1960-1980 period, when hundreds of single-project groups were organized. Some of these groups achieved remarkable results and demonstrated the ability and willingness to plan and undertake comprehensive area development and a sense of substantial commitment to longer-term development objectives. A number of these examples of projects grew to contain elements of community-based development, such as Bella Bella, Burns Lake, New Dawn, and Guysborough. Common to most of these initiatives was an effort to co-ordinate government resources for locally defined objectives, utilize local human and physical resources, search out local support and recognition and link up these diverse elements around a project activity. In some cases, this work included delivery of government services on a third-party basis.

The most promising of these efforts were in underdeveloped areas and disadvantaged communities. Similar experiences took place in the United States and overseas. These cases, however, were only initial steps toward community-based development and aside from a few exceptional cases, they did not mature.

The Task Force is convinced that two major problem areas have hindered further development of this kind in Canada. One important problem concerns the nature of government assistance to such undertakings. It has been based upon support for single projects of groups or individual entrepreneurs through programs like OFY, LIP, Canada Works, LEAP and Special ARDA (DREE). Its help has been of limited duration, typically from three months to a maximum of three-and-a-half years through LEAP. Resources have not been aimed at community capacity building to equip people to continue development on their own. It has expected community people to account for monies through such techniques as separate bank accounts for each project. Government involvement has also presumed effective interdepartmental co-ordination (e.g., CES) and relatively responsive mechanisms to deliver resources when needed or promised. Finally, it has implicitly proceeded on the basis that somehow local people will discover whose mandate relates to what need, which department has resources at the time and what new programs will replace the lapsing short-term thrusts such as Canada Works, with what advance notice and involving which type of criteria. The barriers to effective longer term development in Canada are apparent and while many

are justified by departmental mandates, in total they have simply immobilized promising community-based development in Canada to date.

A second problem area has been related to the absence of recognition of the job-generating potential of small business in Canada and its relationship to promoting more lasting community-based development. Government attention has tended to concentrate on promoting large-scale development projects, neglecting the impressive job creation role of small business.

Recent research in Canada and the United States, noted in a 1980 OECD report, confirms the contribution of the small business sector, and it is this sector which holds the greatest promise for generating opportunities for the disadvantaged. At the same time, it is notable that in a 1980 brief by the petroleum industry to the federal government dealing with the topic of Native people and long-term development, the statement was made that many strategies for economic development in the Native context also have application for the small businessman in remote regions. It also commented that if employment and training were the major Native/corporate development issues of the 1970s, small business development would be the issue of the 1980s.

Thus development strategies for underdeveloped areas could be designed to assist not only the disadvantaged but the small entrepreneur as well. It is the stimulation of small business within the context of a more comprehensive community-based approach which has demonstrated impact on underdevelopment. In the past, government has relied upon investment in single undertakings or individuals to promote development. Experience shows that underdevelopment must be tackled comprehensively and that the individual alone is not the unit of change. Success of individual entrepreneurs has not necessarily brought about an improvement in the community as a whole, but a stimulated growth of the motivated community has often aided the growth of the small business sector.

The establishment of a comprehensive plan to promote community development by involving and fitting together the many local interests and groups has three major policy implications.

- There is a necessary entrepreneurial role for government as a participant in small-scale enterprises in circumstances and areas where private entrepreneurship has been lacking.
- This role cannot be played by a distant bureaucracy. It requires an organization that is part of the community. A Crown corporation could fit this role but a clear mandate would be required.

- The area to be covered by a local development organization must be fairly small in order to be manageable.

The Cape Breton Development Corporation (DEVCO) is often cited as a model. Tom Kent, former director of DEVCO, has argued that a community-based development approach must stress the creation of viable economic alternatives and that these can best be created by providing an institutional framework. In these underdeveloped areas, the concept of overall development costs is advocated. Rather than simply assessing the microeconomic costs and benefits, this concept holds that a global view of development, which would not only include the costs of the actual project but also the future cost in terms of potential loss of community purpose and culture, is essential. The cost of social disintegration and welfare would, therefore, be an integral part of the equation.

The Development System

A comprehensive national development system is needed to provide the framework, support and financing of community-based development in underdeveloped regions and among disadvantaged groups.

A global conceptual framework within which institutions, agencies and programs can be situated and linked would permit governments and communities to move from short-term and single-function programs to developmental programming with a wider and longer perspective. The national framework would take in overall efforts to deal with structural labour market problems. Short-term job creation programs aimed at seasonal and cyclical unemployment could also be fitted into the long-term design.

At the community level, the developmental approach would mean developing multiproject corporations with capacity to plan and manage long-term programs. The prime community objective would be to solve economic and employment problems by building local capacity.

The support systems needed to encourage such development would deliver needed technical advisory services (legal, managerial, administrative, etc.) linked into the overall development approach. Provision would be made to use relevant existing expertise across the country, provided to comprehensive project undertakings on a timely basis. Support for their services would initially come from the national organization but a self-supporting network based upon cost recovery for services rendered would be a major objective.

Finally, a development finance institution must be established to provide grant and loan funds to commu-

nity development corporations, assessing funding requests according to both developmental and financial criteria.

The four essential elements of a comprehensive development system — a national framework, a local vehicle, support systems and a development finance institution — require establishment of some new instruments.

Canada Community Opportunity Development Corporation. The essential national entity in a comprehensive development system is the Canada Community Opportunity Development Corporation (CODC). Potentially a Crown corporate form, it embodies the long-term aspect of the approach. The CODC would be the organizer of the overall system, ensuring that community and business plans were rooted in achievable reality. The CODC would evaluate local proposals by criteria such as ability to lever private sector funds, community impact and potential for growth. Funding would be provided only if performance standards were met. Identifying potential growth and making it happen would be twin imperatives for a national corporation. The activities would vary with the regions but the national machinery would be in place.

Specific roles allotted to the CODC would include the interface with local community development projects, creating and financing an appropriate support network and linking it with the development finance institution.

Opportunity Development Corporation. The community cornerstone of the approach is a new entity called an opportunity development corporation (ODC). A local public-private partnership, the ODC would combine community residents, business expertise, elected representatives, planning and a corporate structure. Although the program is primarily aimed at meeting the needs of the structurally unemployed, the solution requires participation by the broader community. The ODC would act as a local umbrella organization and would stimulate the development of capacity, as well as initiating a variety of social services and economic activities. A community plan and a business plan would be key elements. As the ODC gained expertise and experience, it would gain expanded access to funds. Only one ODC per area or group would be supported by the federal government at any one time, although support for preliminary work could be extended to the limits of the available resources where ODCs did not exist.

A Support Network. The service strategy proposed relies heavily on third-party delivery. As a long-term objective, the intention is to have necessary legal, technical and training services financed by and responsive to

the local ODCs. During the initial phases the CODC would need to perform a midwife role. Services could be contracted for by the CODC from existing institutions or new mechanisms. As the local organizations grow and prosper, financing could move to a cost-recovery basis.

Services such as legal support and management training for community-based development would aid a wide range of communities and enterprises. The overall support service network is crucial to the development system.

Opportunity Development Bank. The final essential component of the proposed system for supporting community enterprise is a development finance institution. Community enterprises need a banker. Existing banks are often unresponsive. Whether one examines the chartered banks, trust companies or the Federal Business Development Bank, the conclusion is the same. Driven by the need for interest rate spreads, these institutions are incapable of the innovative financial packaging required by community-based enterprises. What is proposed is an opportunity development bank linked to the CODC and monitored by it. It could have a separate corporate (policy) identity and could well deliver its service through third-party financial institutions such as the FBDB or credit unions and chartered banks.

A Conceptual Framework for the 1980s

A qualitative improvement in federal government development approaches rests upon two factors noted earlier in the chapter — a new *mix* and a new *fit* for initiatives to deal with underdeveloped areas or disadvantaged groups. The new mix of federal initiatives, even with the development system as a part, is not sufficient in itself to alter the present situation. A new fit is essential and thus a conceptual framework for development of this sector in the 1980s is a critical dimension to any modern development thrust. The absence of a development framework has prevented, in large part, community projects and government programs from evolving in a coherent long-term direction.

Community groups interested in more fundamental improvements and government policy advisers sharing similar aspirations have lacked a clear path along which to travel or with which to identify. Thus, for example, the pay-off for effectively carrying out one or many short-term projects has probably been new funding for more short-term efforts and possibly some individual satisfaction or learning. As noted elsewhere, this has been a circular process with little or no community-wide benefit and little significant change in the disadvantaged circumstances of most individuals. As good performance

on projects has limited or no benefits (other than short-term jobs), the motivation to utilize these resources well has not been present. There is a self-fulfilling and rather negative prophecy in this process. It reinforces the chronic nature of underdeveloped areas or peoples and only occasionally and incidentally develops an avenue for progress or development. The economic, political and social costs of this route are becoming more and more evident.

A conceptual framework for development in the 1980s might well provide an identifiable direction or path. This framework, which is linked to the development system described earlier, is based upon a number of development levels (outlined in Table 8-3) and is related directly to a number of performance standards. A major objective would be to support and nurture community projects which have a longer term potential. Success in

Table 8-3
Development Results Path:
Capacity Level of Community Organizations

Level	Capacities/Activities
1	Initiates a single-issue project Demonstrates initial community acceptance Limited management and organizational ability Limited technical ability
2	Demonstrated ability to plan and manage a single-issue project Demonstrated community acceptance Proposal to create a comprehensive development plan Development of a community development plan
3	Has an approved development plan with community support Has an approved business plan Appropriate organization (ODC) in operation with a board of directors drawn partially from wider community Financial package for first stage of plan
4	Has planned and operated two or more projects effectively Continued business development planning, management and financial packaging including leveraging of private sector capital Perhaps becomes an umbrella organization for existing single-issue projects Makes profits from business activities
5	As above but with significant equity capital accumulation Perhaps a financial institution
6	Core organization is totally supported from business activity (self-supporting)

short-term project initiatives could, if the interest groups wished, lead through a number of development levels to the ultimate objective of relative self-sufficiency and self-reliance. This avenue for longer-term development once outlined to a group might clarify the existing perception of many of the underdeveloped that government assistance is, in reality, a large lottery which produces a jackpot once in a while on the basis of annually changing rules and regulations. Community groups will benefit from the framework as their perception of the reality moves from a lottery to a performance/results path. For example, at level one, which might be use of job creation funds, effective performance could trigger the release of some planning resources if a group wishes to identify and tackle longer-term priorities. The impact could result in more serious use of short-term monies and a stimulus to take on more difficult, structurally related challenges aimed at structural problems.

As a group matures, increases its competence and demonstrates its potential, the resources made available by the development system are linked into the process and evolve in kind and in volume.

A global development framework has a further important feature: it could assist existing and future government programs aimed at underdevelopment to fit into or relate to a coherent context where linkage, continuity and mutual reinforcement is characteristic. For example, a Special ARDA (DREE) grant or loan might be more likely to indicate a level-two situation and LEDA (CEIC) funding might indicate more comprehensive level-three support. While these programs need not be aligned with the framework, the benefits of some association would be evident to community groups and program development staff. The emphasis upon performance standards would further encourage participation in or linkage with this framework. Those departments most involved with underdevelopment and the disadvantaged (such as CEIC, DREE, DIAND, and IT & C), whose individual departmental mandates have restricted their capacity to respond in a comprehensive fashion, may well find the proposed conceptual framework a facilitating device to accomplish their development objectives.

Federal-provincial implications of the proposed development system and conceptual framework can be succinctly stated as potentially opening up new areas for co-operation and linkage, while not subsuming the individual efforts of either level of government. For instance, the announcement by the Province of Saskatchewan in its March 1981 budget of the creation of an economic development foundation for northern and southern Native peoples can be viewed as complemen-

tary to a community-based development system. Such a foundation would be most likely to support and invest in the business activities of an institution such as the proposed opportunity development corporation. The federal-provincial initiatives in Manitoba, which are centred on urban redevelopment, require local-level development institutions to deliver resources, and a development system could support this type of work. The March 1981 announcement of Ontario government support for local level community development corporations is complementary to the proposed federal thrust. A contemplated inland federal fisheries enhancement program (similar to the present Salmonid Enhancement Program) could utilize an effective local level development organization, with the interested provinces in place of the traditional federal-provincial delivery machinery characteristic of existing agreements. The Alberta Indian Equity Foundation established in 1976 to provide investment capital in support of small Indian-owned business would be complemented by a federal development approach designed to increase support and aid the survival of such projects. Existing Native involvement in the foundation funded by the Province of Alberta and a number of the major resource development corporations could be linked to a separate but supportive federal approach. Complementary but distinct federal and provincial actions would be the hallmarks of such linkages.

Even a distinctly federal program such as Native housing could be delivered from two departments (CMHC and DIAND) to a single locally managed agent — an opportunity development corporation — assisted by the proposed network of support as part of the development system. The focus is therefore on local level delivery, co-ordination and priority setting to utilize the resources of all levels of government.

Conclusions

Direct Employment Programs

It has been a consistent theme throughout the Task Force Report that a major government goal in the labour market policy area should be a more productive use of people's time. Implicitly, this means a move away from a make-work orientation to a more positive engaging of people's latent or actual interests and skills. It means not simply adjusting people to jobs, but also adjusting jobs to people in their environments. National labour market objectives must aim not only to meet demand needs in rapidly developing areas, but also to generate demand in areas of excess or inappropriate manpower supply. It is in this realm that direct employment programs may be effectively utilized to alter the structure of demand.

As noted in this chapter, it is essential to distinguish between the differing types of unemployment and to design policies and programs unique to each situation. The Task Force has identified a number of categories and recommends the following approaches to meet each context.

Long-Term Strategies

Under this heading, three specific situations call for long-term policies in place of more temporary responses. The Task Force recommends that areas experiencing chronic high unemployment due to factors of a seasonal nature, a declining industry base, or weak or undeveloped economies each be handled in future with particular strategies.

Seasonal unemployment is predictable and can be generally anticipated by all levels of government in the annual planning cycle. Expenditures to deal with seasonal unemployment should be part of the normal budgetary allocations, geared to maximizing off-season employment in designated areas where seasonal unemployment occurs regularly. As ongoing programs, they should replace the present project-to-project funding and hence be designed to stress greater relative productivity through established delivery mechanisms in all levels of government. Longer-term economic development strategies such as a community-based development approach should also be utilized to explore the potential for developing less seasonally-sensitive enterprises to broaden the local economic base.

Unemployment caused by the failure of a firm or an industry sector calls for long-term adjustment planning targeted to the precise areas and encompassing training and mobility elements. Efforts to strengthen managerial, entrepreneurial, planning and other skills are needed to increase the capacity of the area to utilize its resources and undeveloped potential. Community-based approaches to capacity building are recommended.

Chronically high unemployment due to the disappearance of an economic base or to the existence of untapped potential in an area is the long-term situation which has not been significantly altered by direct employment measures to date. The Task Force advocates an integrated approach with long-term goals within a comprehensive framework to generate and sustain local demand. Community capacity building to stimulate, train, manage, capitalize, support and involve the groups most directly affected is the basic objective. Community and individual dependency must be diminished through an integrated and national approach to chronic unemployment conditions. This approach is focused upon small business undertakings stimulated by and contributing in

a planned way to greater community self-reliance and sufficiency. Capital requirements for such an approach are considerable, especially in the venture capital area, but resources will draw from both private and public sector sources. A new community-based development system for the 1980s is proposed.

Cyclical Strategies

Distinct from the longer-term unemployment problems noted above, the Task Force recommends a different approach to the problem of cyclical unemployment. This is clearly a situation requiring macroeconomic policy attention. A job creation program is only one of the tools for delivering a stimulus if one is deemed necessary. It should be delivered through all levels of government with an eye on utilizing the labour force hired in the most productive way possible. A move away from project funding is recommended. In the realm of direct employment measures, a planned public service employment program is recommended, with training incorporated as an important element. Further productivity could be stimulated by the designation of certain governmental priorities at each level in order to utilize this labour force on tasks with a clear public priority. The fishery, forestry and agriculture sectors could be prime areas of potential commitment. Funding direct employment in the voluntary sector would also be relevant in difficult economic times, but only if training funds were included and if the programs did not imply ongoing funding obligations. The importance of being able to rapidly start and stop this cyclical spending must be emphasized. The advantage of using government departments to deliver such resources is clear in this regard.

The Task Force believes that to have a significant macroeconomic impact on the economy, funding to cope with a cyclical downturn would need to be appropriated on a much more substantial scale than any undertaken to date.

The Task Force has not dwelled at length on the specific resource implications of the approaches to direct employment development which it has recommended. In general terms, the implications are the following. The need to focus on several aspects of long-term strategies highlights the need for distinct funding and programs related to particular situations. A response to seasonal unemployment should be built into annual government budget exercises and should include funds for designated areas of predictable seasonal unemployment at the level required by each specific area. Unemployment caused by declining industry situations, as described earlier, require some interim assistance, which has in part been

provided by the recently announced Labour Adjustments Benefit Program and should be supplemented by long-term development resources.

Essential to tackling the problems of areas of chronically high unemployment is the long-term community-based development approach being recommended by the Task Force. Here a departure from the stop-go type of assistance typical of most job creation programs is advocated. A longer-term commitment to these difficult unemployment problems is considered essential.

Funds will be required to support the national framework, the support system, the local development vehicles and, most critically, a development finance institution. Allocations would need to include substantial venture capital resources to assist community-based capacity building. Such investments would build on some of the most positive outgrowths of past government expenditures on community initiatives. An initial start-up phase would require a moderate sum of money in the order \$10-25 million. The amount could grow to several times this size as soon as the development framework becomes established and communities begin to utilize its resources. A development finance institution is designed

in large part to make available venture capital funds and could invest substantial hundreds of millions of dollars, given present indications of existing demand.

Measures to deal with cyclical unemployment are relevant to macroeconomic policy decisions and as such have not been dealt with in terms of funding levels in the context of this Report.

In summary, it is a new *mix* of direct employment tools which is needed for the 1980s, as well as a new *fit* or linkage of government-wide efforts to adjust to changing labour market circumstances. Central to the context of adjustment and to the comprehensive development approaches proposed above is the need for relevant and accessible training which is the topic of the next chapter.

In the short time available, emphasis was placed upon using available documentation and placing it in the wider development policy context. Peter Kemball provided a useful general contextual framework with reference to existing directions and programs. P. D. Brodhead, Michael Decter and Ken Svenson contributed to the important exploration and rationale for future directions in a paper entitled "Community-Based Development — A Development System for the 1980s."

Chapter Nine

Training to Meet Skill Needs

This chapter examines training programs from the point of view of the labour market. No attempt is made to assess the contribution of training to general social and cultural goals. For the purpose of this chapter, we assume that the purpose of training is to provide people with the skills to meet the demands of the market. In this context, spending on training is analogous to investing in physical plant and equipment; both are made in order to increase output and productivity. Just as investment is made in those projects likely to yield the highest available return, so expenditure for training should be directed to those skills most in demand, where the return on investment in “human capital” is the highest.

However, unlike physical capital which becomes the sole property of the investor and can be bought and sold, human capital becomes in large measure the property of the person being trained — regardless of who pays for the training — and can be “rented” to the employer for the going wage or salary in the labour market. Because human capital does not become the property of a firm, firms get only partial return on their investment over time and hence are generally unwilling to provide large amounts of training for skills which are portable to other firms. For this reason, much of the investment in training must be paid for by the individuals receiving the training or by society in general through governments. The fact that much of the cost of training is borne by governments does not alter the fundamental nature of training as an investment in human capital. Governments should ensure that training dollars are invested wisely so that society receives the highest possible return on its massive investment in people.

Because much of the return on government investment in training flows to the trainees rather than to taxpayers in general, governments also have to ensure a fair distribution of training investment. All Canadians should have access to the training system and where additional training is required to overcome individual and systemic barriers to productive employment, government should be prepared to make that investment. Training is a powerful instrument for achieving an

equitable distribution of economic opportunity, and additional investment in individuals experiencing employment barriers can yield very high returns to society if training enables people who would otherwise not be employable to become productive members of the labour force.

To be a profitable investment, training must produce the skills required in the marketplace. Social equity is not enhanced by training for non-existent jobs. The focus of this chapter is on training to meet the skill needs of the 1980s (as identified in Chapter Four) and on the design of the training system which will enable these needs to be met both equitably and efficiently.

The federal government is only one of several actors in this area. Provincial governments, employers and individuals all contribute to the development of skills required in the economy. Our examination of the federal role is based on the premise that an efficient training system can contribute very significantly to the four major socioeconomic objectives of government set out in Chapter One.

- An efficient and effective training system contributes to *high employment* by increasing the employability of Canadians and by relieving skill bottlenecks.
- It contributes to *stability* by alleviating the skill shortages and other structural problems which lead to wage-push inflation.
- It contributes to *growth* by reducing labour constraints on output in the form of bottlenecks in the supply of particular skills, and by raising the productive capacity of the labour force.
- It contributes to *equity* by providing to all Canadians the opportunity to develop skills for entry into the full range of occupations.

Figure 9-1 shows a range of current federal programs, based on the *Federal-Provincial Fiscal Arrangements and Established Programs Financing Act* (EPF) for post-secondary training, and on the *Adult Occupational*

Training Act (AOT) for training adults. The Canada Manpower Training Program (CMTP) is the means by which the federal government is involved in skill training and academic upgrading in community colleges and other training institutions, and the Canadian Manpower Industrial Training Program (CMITP) covers on-the-job training by employers.

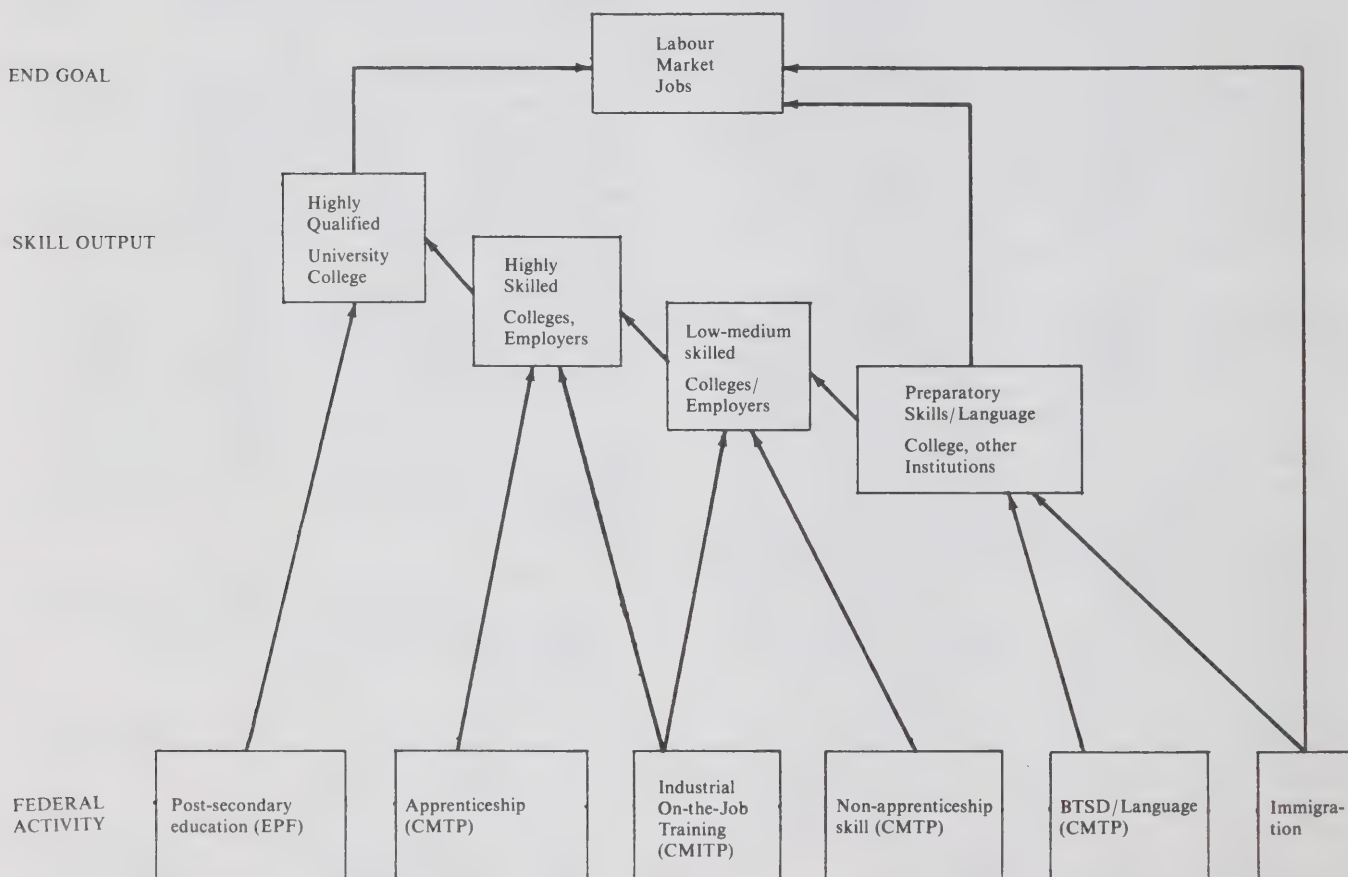
The Task Force has confined its examination of the training system to these programs. Federal involvement covers the full range of skill levels, which we have defined as follows:

- *highly qualified*—occupations and professions requiring post-secondary education in universities and colleges;
- *highly skilled*—blue-collar occupations normally requiring apprenticeship and/or some post-secondary training; and
- *lower skill occupations*—those requiring some vocational or other skill training.

In addition, the federal government contributes to development of the basic skills needed prior to entry into the labour force or into training for skilled occupations.

Figure 9-1

Flow of New Skilled Workers to the Labour Market and Federal Activity



NOTES:

The federal contribution to post-secondary education is financed under the *Federal Provincial Fiscal Arrangements and Established Programs Financing Act*.

The other programs except immigration are financed under the *Adult Occupation Training Act*.

Immigration involvement in training is through language training which may ameliorate a barrier to labour market participation.

The flow among skill levels is not automatic, nor does it necessarily flow in a lock-step fashion from preparatory skill training to highly qualified training. It does show possible flows. For example BTSD graduates can move from preparatory skill training to low-medium skill training, and those graduating from low-medium skill training can proceed to highly skilled training. As well, it would be possible to move from BTSD to highly qualified training, although it would be infrequent.

Our analysis centres on two basic questions.

- How efficient has the training system been in meeting skill needs and satisfying equity objectives?
- What modification in the federal government role is required to ensure that the system can meet the changing skill needs of the 1980s?

Although we analyze each of the three major components of the training system separately, this treatment does not imply that the system is rigidly divided into three compartments with no links between them. It is the contention of the Task Force that the components are inextricably linked, and that resources should be transferable between components. This reallocation is discussed in the final section of this chapter.

Training at the Post-Secondary Level

In this section we talk of training and not education. This is intentional. Education is carried out for a variety of purposes which go well beyond the production of skills for the labour market. Our analysis applies to only one component of post-secondary education — that which is directed at producing skills for the labour market. The achievement of other social goals may well warrant a different allocation of resources to the post-secondary system than that required for training purposes, and our discussion must be read with this caveat in mind.

Growing concern with manpower policy in the early 1960s was reflected in powerful arguments by the Economic Council and other institutions for increased investment in university and college education to expand the supply of highly qualified manpower. Government investment in capital and operating costs of universities and colleges grew substantially and the supply of labour force participants with post-secondary training increased very dramatically.

From 1960 to 1980, labour force participants with university degrees increased from 4.5 to 10.5 per cent and those with college certificates or diplomas increased from 4.0 to 12.5 per cent. University undergraduate enrollment tripled from 107,000 in 1960 to 324,000 in 1970, and full-time community college enrollment grew from less than 50,000 in 1960 to about 225,000 in 1978. Total enrollment in universities and community colleges peaked in 1978, with 620,000 full-time students. These numbers reflect demographic changes as well as rising educational standards, as baby boom cohorts reached post-secondary levels in the 1960s and 1970s. By 1990, with declining youth population, full-time enrollment is expected to fall somewhat.

Canada ranks second only to the United States in terms of percentage of the labour force with post-secondary degrees or diplomas, and the gap between the two countries has narrowed considerably over the last 20 years.

To achieve these advances, the federal and provincial governments have greatly expanded financial support of training at the post-secondary level. Provincial governments currently spend almost \$3 billion on post-secondary training. Current federal support through unconditional cash transfers to the provinces is approximately \$1.6 billion per year. These transfers are equivalent to almost 30 per cent of total institutional operating costs. Tax points equivalent to \$1.4 billion are also transferred to the provinces. The cash transfers and the tax points represent 59 per cent of operating costs. Federal grants for research are provided via various granting councils. The federal government also supports training at the college level directly through seat purchase under the AOT Act.

The concern of the Task Force in examining government support of training at the post-secondary level is focused on labour market considerations. Consequently, in considering the efficiency of government support, we assess the effectiveness of the post-secondary system strictly in terms of its ability to supply highly qualified manpower to meet labour market needs. The basic question such an evaluation must answer is whether productivity could be improved by a reallocation of resources within the post-secondary system, between this system and other training systems, or between post-secondary training and investment in other forms of capital such as infrastructure or plant and equipment. Many complex and interrelated factors must enter into such an evaluation. The Task Force has attempted here merely to sketch some of the essential criteria and techniques.

One common technique for evaluating the efficiency aspect of resource allocation decisions is benefit/cost analysis, which in this case must be considered in terms of both individuals and the economy as a whole. Other indicators include relative earnings of graduates in various occupations and disciplines, unemployment and job vacancy rates, and forecasts of excess supply or demand for highly qualified manpower.

The conceptual basis for benefit/cost analysis is to take account of all benefits and costs that result from the implementation of a particular project. In the case of post-secondary training, the private benefits and costs are those realized by the graduates or participants of an educational program, and the social costs and benefits

accrue to persons associated with the graduates—this ultimately encompasses the whole economy.

Operationally, calculations have tended to include only those benefits and costs which can be measured in monetary terms. The costs include direct expenditures of educational institutions, which include depreciation of physical assets and imputed forgone interest on those assets; forgone earnings during time spent in education and forgone taxes on those earnings; expenditures for books, supplies, transportation, and living costs additional to those normally incurred in other activities. Private and social costs depend on the student fees and government aid — with private endowments also bearing some costs.

The benefits are based on the increase in lifetime earnings over earnings of comparable workers without the additional education. These earnings differentials are illustrated in Figure 9-2. Differentials usually are adjusted for unemployment, labour force participation rates, mortality rates and economic growth rates. The private benefits are defined as additional net-of-tax lifetime earnings resulting from additional training less the costs to the individual of undertaking that training. The total economic benefits of additional training (often

called social benefits) are defined as the increase in output resulting from the training (as measured by the differential in gross lifetime wages between those with and without training) less the total costs of that training (fees plus government share of the cost).

Although there are a number of limitations in using this type of analysis, it nevertheless provides one useful guide to the appropriate amount of investment in post-secondary training and the distribution of that investment.

A Task Force study of the data from the 1960s and early 1970s in Canada, conducted by David Stager, indicates that the social and private rates of return to investment in university training fell, although the amount of the decline varied between one and four percentage points depending on the precise methods of estimation.

It also revealed significant differences in the returns to investment across different fields of university training, the returns being highest for business, engineering, economics and health disciplines and lowest for arts, education and social work.

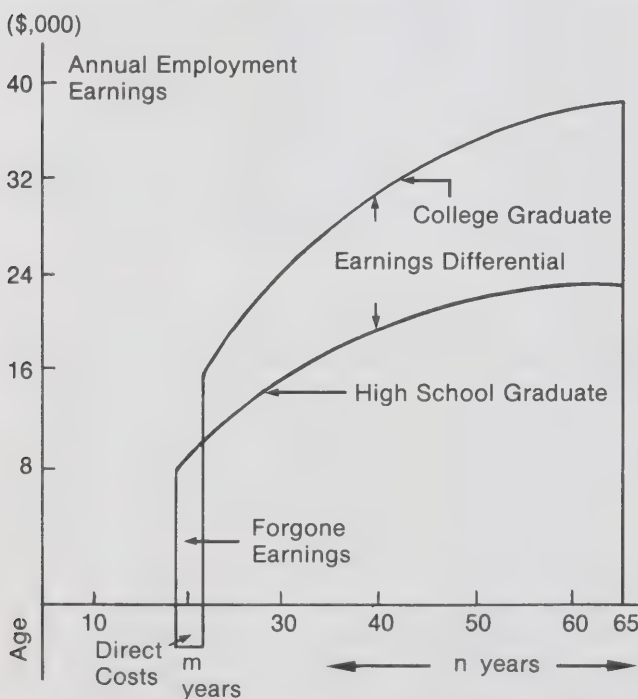
Unfortunately no analysis of changes in returns to investment in Canada exists for the period after 1972, so that it is difficult to draw firm conclusions from this analysis. Recent U.S. and U.K. studies show a significant decline in the returns to investment in post-secondary education. As the fraction of the labour force with post-secondary training has risen dramatically in both of these countries, these results are undoubtedly relevant to the similar Canadian situation.

The Task Force has found evidence from analysis of Canadian and foreign cost/benefit studies that the overall size of the post-secondary sector is too large and has concluded from this that it could be contracted somewhat, with resources modestly reallocated from education, general arts and sciences and social work to engineering, business, economics and technology. However, the evidence from cost/benefit analysis is not strong and other indicators of resource allocation must be considered.

Federal investment in the training of highly qualified labour can also be evaluated in terms of the labour market experience of recent graduates. The most thorough Canadian study is a recent survey by Statistics Canada (March 1981), of a sample of university and community college graduates, conducted in June 1978. Some of the results are presented in Table 9-1.

While these data must be interpreted with considerable caution, it is clear that certain fields of study are associated with high participation rates, low rates of

Figure 9-2
Hypothetical Lifetime Earnings Profiles for High School and College Graduates



Source: David Stager, "Federal Involvement in Post-Secondary Education for Highly Qualified Labour." Paper prepared for the Task Force.

both unemployment and underemployment, and higher salaries. For university graduates these include business and commerce, education, engineering, architecture, dentistry, and pharmacy—in other words, the traditional professions. For college graduates, they include data processing, medical and dental services, and various technologies.

Relative earnings by occupation are another indicator of the effectiveness of post-secondary education in meeting labour market demand.

The average starting salaries offered to university graduates by 80 companies in Canada for the period 1965 to 1977 are shown in Figure 9-3. It is obvious that starting salaries declined sharply relative to average industrial earnings in the late 1960s and early 1970s. But the decline seems to have been very brief for engineering and science graduates, as their relative salaries were more or less stable in the mid-1970s.

More important, however, is the recent experience in comparison with the long-term trend. Unfortunately,

Table 9-1

Labour Market Experience of 1976 University and College Graduates, Two Years After Graduation, Canada^a

	Labour force part. rate ^b	Unemployment rate ^c	Under-employment rate ^d	Median salary ^e
Total university ^f	93.2	8.4	37.7	\$14,800
Bus., manage., commerce	97.5	4.4	32.4	14,900
Education	96.2	4.8	28.2	15,000
Fine and applied arts	93.1	14.1	39.5	13,000
Humanities	91.9	10.9	49.8	14,000
Social sciences	92.7	10.3	47.2	14,600
Agric., bio. sciences	86.2	11.1	40.1	13,400
Engineering	96.5	5.2 ^h	13.1	18,000
Architecture	99.3	—	32.0 ^h	15,200
Dentistry	96.0	—	—	27,000+
Medicine	93.2	6.5 ^h	—	16,200
Nursing	94.1	—	37.5	14,700
Pharmacy	97.2	—	—	17,700
Math., physical sciences	91.6	10.3	34.3	14,800
Total college ^g	96.0	6.7	25.3	12,300
Fine, appl., perform. arts	91.9	11.9	36.1	10,100
Bus., manage., commerce	97.6	6.4	39.9	12,500
Secretarial arts, sciences	96.1	5.6	40.9	9,100
Data proc., comp. sciences	97.4	—	19.8	13,800
Primary industries	98.5	7.2	28.4	13,200
Medical, dental services	95.2	6.1	6.2	12,900
Technologies	98.3	5.2	28.9	13,800
Transportation	97.6	—	52.7	13,600
Mass communication	97.5	6.8 ^h	32.7	11,300
Community services	94.2	10.0	28.7	11,000
General arts and sciences	93.2	8.3	28.6	10,100

Notes: a. Excludes Quebec, which did not participate in the survey.

b. Includes all persons except those not looking for a job.

c. Includes persons who were not working and were looking for a job at the time of the survey.

d. The percentage of graduates who were underemployed is a combination of those whose academic qualifications were higher than the formal requirements of their jobs and those who felt that their level of attainment was not necessary for the job, regardless of its formal requirements. A somewhat complex mathematical procedure was used to make this determination.

e. The question was based on an interval scale so that a respondent could record only the range within which the salary fell. The highest level was \$27,000 and over.

f. Bachelor and first professional degree graduates only; excludes university diplomas or certificates and master's and doctorate degrees.

g. Graduates of 1 to 4 year programs in community colleges and the CEGEPs.

h. Number of respondents is small; the data must be treated with caution.

Source: Statistics Canada, *Job Market Reality for Recent Graduates*, 1981. The data are based on large sample survey of 1976 graduates conducted in June 1978.

historically comparable occupational earnings data are very limited. Patterns of relative earnings and starting salaries, however, offer a longer historical context in which to consider the current levels for relative earnings.

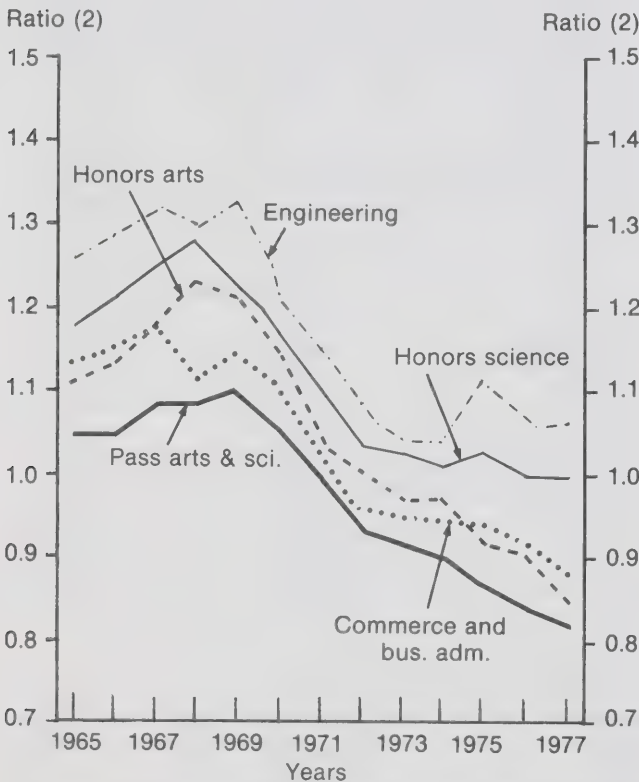
Relative earnings for wage and salary earners in professional occupations in Canada, compared to average industrial earnings, declined substantially during the 1930s and 1940s, followed by either stable or slightly improving relative earnings in the 1950s and a fairly strong improvement for some in the 1960s (Meltz and Stager, 1979). The relative total incomes of some self-employed professionals have followed approximately the same patterns. Doctors and dentists enjoyed a strong, steady improvement in relative incomes in the 1950s and 1960s. Lawyers, engineers, architects, and accountants

experienced a more cyclical and modest improvement in their relative positions.

Starting salaries of university graduates have since declined somewhat relative to average industrial salaries. This is sometimes cited as evidence of a “surplus” of graduates, but in our view the recent decline represents instead a return to a pattern of relative salaries more typical of the 1950s and 1960s.

Another approach to assessing the appropriate level of investment in post-secondary training is to examine the imbalances that would occur in the labour market under plausible assumptions about output, technological change, attrition, etc., assuming the current level and mix of post-secondary training. Table 9-2 shows trends in university education since 1960. Undergraduate enrollment in arts, education and related disciplines increased from 64 per cent in 1960 to 73 per cent in 1970, while enrollment in engineering dropped from 15 per cent to 9 per cent and enrollment in health disciplines dropped from 9 to 6 per cent in the same period. In the 1970s enrollment in arts, education and related disciplines declined somewhat, reaching about 67 per cent in 1976, and enrollment in more specialized professional and technological fields increased.

Figure 9-3
Average Starting Salaries of Bachelor's Degree Graduates⁽¹⁾ Compared with Average Industrial Earnings, Canada, 1965 to 1977



- (1) Includes only graduates in selected disciplines who were employed in industry.
(2) Ratio of average starting salary for graduates to average earnings in industry (industrial composite).

Sources: *Survey of Recruiting Rates for University and Community College Graduates*, Pay Research Bureau, Public Service Staff Relations Board. And *Employment, Earnings and Hours*. Statistics Canada (72-002). Z. Zsigmond, et al., *Out of School—Into the Labour Force*, Chart 32. Statistics Canada, 1978.

Table 9-2

Percentage Distribution of Full Time Undergraduates by Discipline in Canada, 1960-1977

	1960	1970	1977
Arts, science, education	64.1	73.0	67.0
Engineering	15.0	9.3	10.4
Medical and health	9.0	6.3	6.9
Business and commerce	6.1	6.1	10.0
Law	2.3	2.6	3.0
Other	3.6	2.7	2.7
Total (%)	100.0	100.0	100.0
Total ('000)	107.4	323.6	312.6

Source: David Stager, “Federal Involvement in Post-Secondary Education for Highly Qualified Labour,” paper prepared for the Task Force.

In community colleges from 1962-63 to 1975-76, enrollment in technology courses increased from 9,000 to 28,000, in business courses from 1,000 to 40,000 and in applied arts from 1,000 to 17,000. In addition, in 1975-76 approximately 75,000 college students were enrolled in pre-university programs which did not exist in 1962-63.

The implications of these current trends were discussed in Chapter Four where it was concluded that a significant excess of highly qualified labour in the aggregate would exist through the 1980s (Table 4-15),

but that shortages would persist in the West (Table 4-16) and tight markets would persist for engineers, technologists, systems analysts and some other disciplines throughout the 1980s (Table 4-8). If the major resource projects proceed and world demand recovers faster than expected, the market for engineers, technologists, and related manpower could become extremely tight. Markets for some scientists could also become extremely tight if a major commitment is made to encourage scientific research. The shortfall in terms of numbers of engineers or scientists is extremely difficult to quantify and no "top-down" forecasting method such as we have used here is sufficiently accurate for the purpose.

Although no one of the above four methods for assessing the best allocation of resources for training at the post-secondary level produces highly reliable results, where the results from all four methods are similar they carry much greater credence. The Task Force analysis using all four methods suggests the following points in the context of the relationship of post-secondary training to labour market needs, recognizing provincial roles in all these areas.

- Some reduction of the total commitment of resources to post-secondary training would be appropriate in order to free resources for other types of training.
- Significant reallocation of resources is required within the post-secondary system. This would include expansion of instruction in engineering (especially those fields related to primary industry development, the continuous process industries, heavy construction electronics and biotechnology); expansion of technological training at the college level; reduction in instruction in general arts and disciplines related to teaching, education and public administration; selective expansion of graduate training in some areas of pure science to facilitate an increase in research and development activity; selective expansion of business courses at the college level and at the MBA and DBA level.
- Although reallocation of resources within the post-secondary sector is required, excessive contraction of specialized facilities and faculty must be avoided.
- Because the demand for highly qualified labour in Alberta and British Columbia will exceed by far the supply of graduates from those provinces, large proportions of the net requirements will continue to be met by graduates from other provinces. For this reason, the number of new graduates in business, engineering, the technologies and pure science in central and eastern Canada should be planned to exceed the demand in this part of the country.

- Some shifting of the burden of financing post-secondary education back to the private sector would promote a better allocation of resources across disciplines and between post-secondary training and other competing investments, although some increased funding for student support would be necessary to ensure equality of access and to compensate for some net migration of graduates.

These five main conclusions follow from our analysis of the requirements of highly qualified labour in the 1980s and from our assessment that more resources must be directed to the training of highly skilled blue-collar workers. Clearly, various factors other than manpower requirements are bound to influence the funding of university and college training. Nevertheless, some changes in federal policy would appear to be justified on the basis of labour market considerations. In particular, policy should be structured to encourage universities and colleges to be more responsive to changing labour market conditions.

Professor Peter Leslie, in his recent report on *Canadian Universities 1980 and Beyond* (1980), commented on the difficulty universities have in the following way:

Our survey of the arrangements which Canadian society makes for the financial support of its universities has revealed two major flaws. One is that there is hardly any carrot for innovation; the other is that there is only a very flimsy stick for inducing structural change where it is necessary, and for inventing solutions to staffing problems and program redundancy or overcapacity. . . . In short, there must be rewards for attracting students and penalties for driving them away; and this implies a financing technique which is fairly sensitive to enrollment, at least over the longer term. Only under these conditions can an institution have any financial incentive to take its teaching function seriously, to redesign academic programs and to revise curriculum to meet changing needs and to reflect changes in knowledge, and to reward its faculty for excellence in teaching. (pp. 314-315)

Although it is easy to talk of increased adaptability, the achievement will be much more difficult in the 1980s when total enrollments are static or declining than it would have been in the growth environment of the 1960s. In the present environment the institutions face a severe adjustment problem because existing staff and facilities cannot be adapted to widely varying disciplines. Adjustment and adaptation within the post-secondary sector are even harder than in the automotive or textile industry, given the high degree of specialization of labour and equipment. Moreover, it is critical from a labour point of view to maintain the base training capacity in disciplines that are not currently in

demand, so that training can be expanded rapidly when labour market conditions change. In encouraging flexibility, government must not over-react to changing cycles of demand for university graduates.

In sum the Task Force would state the following federal labour market objectives in relation to training at the post-secondary level.

- The supply of college and university graduates should be sufficient to meet needs for highly qualified labour in Canada without the need for immigration.
- Colleges and universities should have sufficient flexibility to adapt their programs according to changing labour market needs.
- A base capacity should be maintained in all disciplines so that enrollments can be expanded rapidly to meet changing labour market requirements.
- Institutions should train to meet national manpower requirements and not just those of the province in which they are located.
- Students should be encouraged to enter disciplines that are likely to be in high demand in the five-to-ten-year time horizon.

The federal government could contribute to the achievement of these objectives in the following ways:

- by ensuring the provision of good labour market information to the institutions and to students;
- by better management of the demand for labour for research and development and for the federal public service; and
- by making its contribution to financing of training at the post-secondary level in a more appropriate manner.

It is to a discussion of the last point that we now turn. It is the Task Force's view that the following factors should be considered in the development of needed changes in training at the post-secondary level.

First, some portion of federal expenditures tied to the base support given the institutions by the provinces would be important in maintaining the academic base in disciplines currently not in high demand.

Second, to encourage institutions to be more adaptive, greater incentives to respond to student demand are needed and students should have more "clout" in exercising that demand. For this reason, student fees should probably constitute a much greater proportion of revenue for the institutions than they now do. Moreover, fees more closely related to the marginal cost of instruction than they now are would provide some incentive for

institutions to expand the expensive programs in technologies, engineering, pure science, etc. In order to enable students to meet at least part of these higher fees, federal aid to students would probably need to be increased and designed in such a way as to encourage students to enter disciplines in which labour markets are expected to be tight. This may mean full compensation for the higher fees that institutions would have to charge for certain disciplines (engineering, science, technologies, etc.) and especially for graduate training.

There are many possible ways to structure such a student support program. From a labour market perspective, however, an efficient support system could consist of two elements.

- Grants could be designed to cover a greater fraction of fees in those disciplines in high market demand or in which there is a compelling national interest.
- Loans could cover the remainder of fees and some part of the income forgone by students, with repayment contingent on subsequent earnings.

The Task Force recognizes that student fees and student aid systems are not a federal responsibility, but that student aid systems are shared by the federal and provincial governments. Therefore, extensive and detailed consultation with the provinces and institutions would be necessary to establish the feasibility of the suggestions above.

As the whole question of student finance has been addressed in the Report of the Federal-Provincial Task Force on Student Assistance (1981), little discussion of student financing arrangements is needed here.

Third, institutions could be encouraged to tap other sources of private sector funding. Canadian institutions have been far less entrepreneurial than their U.S. counterparts in deriving support from private industry. To encourage institutions to meet more effectively the needs of employers and to encourage employers to increase their interest in and support for the institutions, the federal government could institute a program whereby it would match corporate contributions to institutions for the establishment and operation of specialized training programs. The natural resource industries in particular are a potential source of finance for some university faculties. The financial involvement of industry would not only increase university training in certain disciplines but might also lead to improvements in the quality and relevance of course offerings.

Even greater potential exists for industry-college co-operation. Federal matching grants appear to be an efficient and cost-effective means to encourage industry

participation and to ensure that certain specialized manpower needs are met.

Cooperative education and other forms of work-study programs represent other means of increasing employer involvement. Cooperative education refers to programs which provide periods of study interspersed with periods of work, allowing students to acquire valuable work experience. Business and industry are linked to the educational institutions through the placement of students as well as through curriculum development. The federal government has in the past provided funds for the administrative costs associated with the setting up of cooperative education programs. The Task Force recommends continuing federal involvement, possibly in the form of grants to cover some of the administrative costs of setting up such programs, particularly to develop programs supportive of an affirmative action approach for women, Native people, and the disabled. Federal financing could provide some student assistance during the first year to cover the extra costs of enrolling in a cooperative education program, or could provide special grants to employers to hire the disabled. The important point from the Task Force point of view is the link with the job experience which such programs provide.

In its financing of post-secondary training, it would seem appropriate for the federal government to absorb more of the cost of university-based research. The federal granting bodies could pick up a greater fraction of research overheads. As this element is more appropriately dealt with by research councils themselves, no elaboration is required here.

A final element of a federal financing package could be some form of thrust funding or adjustment assistance for the institutions, to encourage the expansion of physical plant and human resources in disciplines in high demand. Such assistance could be channelled to universities and colleges through an agency which might be made up of members appointed by the federal and provincial governments and industry. Whatever the form of this financing and whatever mechanism is used to deliver it, the Task Force concludes that some mechanism is needed to provide funds for the additional instructional capacity in these high demand disciplines in order to avoid shortages of the highly qualified.

In sum, significant adjustments to the post-secondary system will be required to meet the skill needs of the 1980s. While the federal government can play a part in improving the adaptability of the system, the main initiatives will have to be taken by provincial governments and the institutions themselves. Federal policies can be facilitative, but collective federal, provincial, institutional and private sector action is required to achieve full success.

Training for the Higher Skill Trades

This section is concerned with the domestic training "system" for a range of occupations within three broad groupings: the higher skill manufacturing, construction, and mechanical and repair trades. These occupations have a number of common characteristics with respect to training. They all involve high levels of manual skills requiring lengthy training (generally about four years). Training is provided predominantly on the job by individual employers but frequently involves an institutional component as well. The main method of training is apprenticeship (a combination of employment-based training and vocational education), although some of the skills can also be acquired by a less formal process of upgrading on the job.

The training "system" for these occupations in Canada thus includes the provincial apprenticeship systems, training programs operated by individual companies outside of the formal and regulatory arrangements of the provincial systems, and other less formal methods of skill acquisition to reach journeyman/woman status. This is therefore a different kind of training system than that constituted by the post-secondary education sector. It should be noted that we are not concerned here with the provincial apprenticeship systems as a whole, since these cover training for a wider range of occupations than the higher skill trades.

As shown in Chapter Four, the recorded annual average output from the major domestic supply sources for these higher level trades skills over the period 1975-79 was around 20,000, within which the construction trades represented nearly one-half. This excludes the output from company-based training for which no comprehensive information is available.

There have been several phases in the historical development of the domestic training system for these skills and in federal government support for its development through the provincial apprenticeship systems. Concern about the inadequacy of arrangements for skilled trades training in Canada surfaced in the period following World War I and again after World War II. Between the wars and during the 1950s, however, Canada opted for heavy reliance on the training systems of overseas countries and imported trade skills to meet the demands of industrial expansion.

By the end of the 1950s, concern about vocational and technical training generally had resurfaced and was in large part the basis for the federal *Technical and Vocational Training Act* (TVTA) of 1960. Although apprenticeship training grew in significance, the decline in immigration by skilled workers expected in the 1960s

did not occur. Canada continued to be significantly dependent on overseas supply sources to meet demand for trades skill (especially in manufacturing). Demand in this area in the 1960s was overshadowed by the relatively stronger growth in demand for occupations in the services sector.

In the second half of the 1970s, renewed strength in the goods-producing sector generated relatively stronger demand for industrial trade skills. By the end of the decade there was again increasing concern about the adequacy of the training system to supply the needs of industry. By that time, the federal government had become involved in support for trades training in the following ways.

- Under CMTP, the provinces are reimbursed for the costs associated with provision of statutorily required institutional training for apprentices.
- The federal government pays training allowances to apprentices attending school who are not eligible for or entitled to unemployment insurance benefits.
- Again under CMTP, the federal government purchases a significant amount of pre-employment training related to trades designated for apprenticeship, including the higher skill trades.
- Under CMITP, the federal government also assists employers of new apprentices in initial on-the-job training for up to 20 weeks by reimbursing a portion of wages.

In September 1978, the federal government announced a new program — Critical Trades Skill Training (CTST) — involving a substantial increase in federal resources allocated to training for certain higher skill trades. The CTST program, which first became operative in fiscal 1979-80, was intended to assist the private sector to develop a training capacity in a select group of high skill industrial trades.

This initiative reflected the widespread concern about skill trade shortages which developed in the late 1970s, expressed in the 1978 industrial sector consultations and later in a number of surveys which documented the extensive difficulties faced by firms experiencing shortfalls. Over 86 per cent of respondent firms in a survey conducted by Machinery and Equipment Manufacturing Association of Canada (MEMAC) in the first quarter of 1979 were experiencing difficulties in meeting their needs for journeymen/women. A 1980 survey by the Economic Council of Canada, covering 1,400 firms Canada-wide, found that about one-half of all firms reported some hiring difficulties in the recent past. Around 20 per cent of firms in the ECC survey which experienced shortages in skilled manufacturing trades responded by curtailing production. The findings from

these employer surveys were consistent with other statistical indicators pointing to increased labour market tightness in high skill trades occupations.

One statistical indicator of changes in labour market tightness within an occupation is the "V/U ratio," the ratio of unfilled job vacancies to the number of unemployed in that occupation. A CEIC analysis (June 1980) of V/U ratios for 13 selected skilled trades between 1974 and 1979 found that while not all encountered increases in labour market tightness in recent years (as measured by shifts in the V/U ratio), labour markets were tighter for tool and die makers, machinists, motor vehicle mechanics and machinery mechanics (industry, farm and construction) than for the other occupations studied; that by 1979 two of these trades — tool and die makers and machinists — appeared to approach or exceed 1974 levels of tightness (the previous peak); and that labour markets for these trades were tighter in Alberta than in other parts of the country.

This same CEIC study also examined the extent to which hiring difficulties in these trades in 1979 were attributable to cyclical or secular factors. The study concluded that hiring difficulties in 1979 in the four trades referred to above were associated with both cyclical factors (indicated by higher rates of industrial capacity utilization) and secular factors (indicated by slower growth in the supply of these trades).

As shown in Tables 9-3 and 9-4, industrial capacity utilization in 1979 was approaching the peak of the economic cycle. But the annual new supply in the four occupations in 1979 from immigration and apprenticeship combined was almost 10 per cent less than in 1974. This decline was due to the reduction of more than 3,000 persons in the annual supply from immigration, which was larger than the increase of 2,200 apprenticeship completions in 1979. The expansion of supply from the major domestic source for these skills, although substantial, was therefore not large enough to offset the decline from immigration.

The decline in supplies of higher skills from immigration, illustrated in the 1980 CEIC study described above, has occurred in all trade groupings, but its significance is greatest in the case of the manufacturing trades. Historically, dependence on offshore sources has been greatest in the manufacturing trades, and even in 1979 some 38.1 per cent of total inflows in these trades was recruited overseas, as shown in Table 9-5. Although this was considerably less than the corresponding proportion only five years earlier (66.4 per cent in 1974) for manufacturing trades as a group, in some highly skilled manufacturing trades the rate of immigration decline has been even more rapid (and from an even higher level of previous dependence on immigration).

Table 9-3

Indicators of Cyclical Influence on Labour Market Tightness in Selected Higher Skill Trades, 1974-1979

Year	Capacity utilization index ¹	Tool and die making	Machinist, machine tool	Industrial, farm and construction machinery mechanics	Motor vehicle mechanics
(V/U Ratio) ²					
1974	90.3	70	93	53	44
1975	81.2	14	20	26	19
1976	82.7	44	15	20	15
1977	82.2	61	19	16	10
1978	86.0	118	37	15	13
1979	87.2	137	64	24	20

¹Average of Quarterly Indices (Stats Canada, Cat. No. 31-003).²Based on CEC data on registered job vacancies and UIC data on UI benefit claimants.Source: CEIC, *Labour Market Tightness in Selected Higher-Skill Occupations*, August 1980.

Table 9-4

Changes in Availability of Skilled Tradesmen/women between 1974 and 1979

Occupation	Year	Immigration	Apprentices ¹	Total
		(1)	(2)	(3) = (1) + (2)
Tool and die makers (8311)	1974	375	95	470
	1979	270	132	402
	Difference	-105	37	-68
Machinists (8313)	1974	1,549	203	1,752
	1979	690	372	1,062
	Difference	-859	169	-690
Ind., farm, const. machinery mechanics (8584)	1974	1,076	842	1,918
	1979	514	1,793	2,307
	Difference	-562	951	389
Motor vehicle mechanics (8581)	1974	3,098	2,386	5,484
	1979	1,438	3,502	4,940
	Difference	-1,660	1,116	-544
Total above four occupations	1974	6,098	3,526	9,624
	1979	2,912	5,799	8,711
	Difference	-3,186	2,273	-913

¹These data need further verification because in some cases not all the 7-digit occupations have been included in this 4-digit category.Source: CEIC, *Labour Market Tightness in Selected Higher Skill Occupations*, August 1980.

The decline in offshore recruitment has been accompanied by a more restrictive federal government policy towards Canadian firms seeking to import skilled workers. However, the reduced availability of overseas workers (especially when buoyant economic conditions prevail in the European Economic Community countries) appears to have been a significant factor also. Despite the change in federal policy, no firm has been denied access to offshore recruitment to meet immediate requirements for skills requiring longer-term training.

The Outlook

The central question for training policy in this area is whether the current training arrangements for higher level trades are adequate to supply industrial requirements in the 1980s.

The requirements for these skills arise from both growth and replacement demand. As shown in Chapter Four, strong demand is projected to 1990 for manufacturing trades in particular and also for construction

Table 9-5

Supply Sources of Higher-Skill Manufacturing Trades, 1974-1979

Year	Domestic sources			Offshore sources			All sources	
	Apprentice	Journeyman/ woman certificate	Total	Immigration	Employment visas	Total	Total	Offshore as per cent of total supply
1974	2,097	1,876	3,973	7,566	+ 289	7,855	11,828	66.4
1975	2,478	2,073	4,551	5,933	- 329	5,604	10,155	55.2
1976	2,969	1,249	4,218	4,034	+ 92	4,126	8,344	49.4
1977	3,652	1,539	5,191	3,164	- 153	3,011	8,202	36.7
1978	3,872	1,192	5,064	2,213	- 444	1,768	6,832	25.9
1979	3,654	2,455	6,109	2,933	+ 822	3,755	9,864	38.1
Total	18,722	10,384	29,106	25,843	+ 277	26,119	55,225	47.3

Source: CEIC, *Supply-Demand Imbalances in Higher Skilled Trades*, June 1980.

trades. Although growth demand is generated by the level and structure of industrial development, replacement demand arises from depletion of the stock of trade skills due to wastage, especially aging.

Replacement demand in the higher skill trades is likely to be substantial and relatively greater than for those with university and college training.

Estimates based on the 1971 Census indicate that up to 15 or 20 per cent of persons in the highly skilled occupations as a whole were aged 55 years or more in 1979. This is somewhat higher than the corresponding proportion for the highly qualified occupations (11 per cent). Exits from the trades work force through retirement over the next decade will be considerable. These estimates are supported by findings from several employer surveys. They are consistent with the fact that the expansion of post-secondary education occurred more recently and involved predominantly the young, while entrants to the trades work force, especially from immigration, have been older than their highly qualified counterparts.

The "aging" of an occupational work force not only depletes the stock and creates replacement needs, but also contribute to labour market imbalances in other ways. Decreased mobility of the work force is one important factor, because geographic mobility in the trades labour market could be a high priority in the 1980s, depending upon the pattern of industrial and resource development. An aging work force, with relatively fewer mobile entrants from declining offshore supplies, could mean reduced geographic mobility of the trades work force. Structural as distinct from aggregate demand/supply imbalances could therefore increase unless there is a compensating inflow of younger and more mobile entrants. Precisely these considerations (based on actual experience) have been advanced by

Ontario employer groups to support an expansion of pre-apprenticeship training for young people in certain construction trades.

The outlook strongly implies the need for expansion of the domestic training system for these skills. In fact, both provincial apprenticeship authorities and the private sector — as well as the federal government — have already recognized and responded to this need. Apprenticeship intakes, especially in the western provinces, have been increasing substantially. In some provinces (such as Ontario), steps have been taken to bring training in the manufacturing trades (previously haphazard or non-existent) within the ambit of the regulated apprenticeship system. As well, innovations within apprenticeship have been introduced in collaboration with industry to encourage further expansion of training, e.g., through allowing apprentices to be indentured to local industry committees rather than single employers. Outside the apprenticeship system, some provinces have developed or expanded trades training through pre-apprenticeship courses in community colleges and shifted some training into the secondary school system.

In the face of this expansion and its gathering momentum, any proposal for further expansion must be carefully considered, particularly because concern over the adequacy of the training system has been a recurring theme in the history of Canadian trades training.

On balance, the Task Force has concluded that further expansion is badly needed on two grounds. The first is that the growth projections outlined in Chapter Four point to continuing strength of demand for high skill trades throughout the decade, while recognizing that there will continue to be variations in demand between trades. The second is that the degree of dependence on overseas sources for these skills, despite the recent domestic expansion, is still so great that considerable

scope remains for further reductions in immigration as a response to any threatened oversupply.

The Adequacy of Current Training Arrangements

The question of how to achieve the needed expansion requires first an examination of the factors retarding expansion. The domestic training system for the higher skill trades has failed in the past to supply the needs of industry for these skills and continues to produce insufficient supplies for several reasons.

In the first place, the availability of supplies from offshore sources reduced the need for development of the domestic training system to provide for all needs. As noted earlier, Canada has relied heavily on the training systems of overseas countries, especially in the manufacturing trades.

Secondly, a characteristic of the domestic training system for these skills is its instability during the business cycle. The effect of cyclical instability is curtailment of training during a downturn phase, affecting both new entrants and those already in training. This leads to reduced supplies during the upturn, which then contribute to tightness in the labour market. Because of the shorter lead times involved in obtaining tradesmen/women from offshore in times of expanding production and the tightness in the domestic trades labour market, there is greater resort to immigration and employment visas to obtain supplies during the upturn.

A 1973 Ontario report by the Ontario Ministry of Colleges and Universities documented for the period 1957-70 the association of low levels of apprentice registration (intakes) with periods of declining employment, and conversely increased intakes as unemployment declined. The trade occupations involved were carpenter, motor vehicle mechanic and electrician.

The cyclical instability of training capacity derives from an inherent limitation in the training system for high level trades skills. Because training is provided predominantly on the job, cutbacks in production (in response to demand shifts) reduce the opportunity for training.

The fact that training in these skills is provided on the job by individual employers provides a further explanation for underinvestment in this form of training — the high costs of doing so for some employers and the risk of doing so in terms of the likely return on investment in training, due to loss of the trainee (or tradesmen) to another employer.

Several recent studies have examined the costs and benefits to employers of providing high skill trades

training, especially in the metal working trades in the manufacturing industry where previously supplies were obtained largely from overseas. The findings are not always comparable because of the different approaches taken, but they do justify some general conclusions.

For many but not all employers, training apprentices in the metal working trades involves a net cost over the apprenticeship period as a whole, sometimes a substantial one. In general, the net cost to firms is concentrated in the early part of the training period. In a 1978 Ontario study, for example (Currie, Coopers and Lybrand), 65 per cent of the net cost was concentrated in the first two years of the apprenticeship period. The high concentration of net cost in these early years is in large part due to the low productivity of the apprentice relative to the wages paid (which are commonly above the legally prescribed minimum).

The 1978 Ontario study found that on average, apprentice productivity in the first six months of training was equal to only 82 per cent of wages paid, rising to 86 per cent in the second six months but still only 95 per cent in the second year. Another study (Dept. of Employment and Immigration, 1977) reported that typically apprentice productivity in surveyed firms was equal to only 25 per cent and 65 per cent of tradesmen/women productivity in each of the first and second years of apprenticeship, whereas the wages of apprentices were set at 68 per cent and 77 per cent of those applying to journeymen, respectively. Wide variations in apprentice productivity (whether estimated or actually recorded) were not uncommon in these surveys. A 1980 British Columbia study covering three firms found apprentice productivity differentials of almost 30 per cent over the apprenticeship period as a whole.

Another significant finding relates to the impact of apprentice wastage on training costs. The 1978 Ontario study found that on average, 15-20 per cent of the net cost of apprentice training could be attributed to trainee attrition.

Finally, the 1978 Ontario study found that training firms, on average, lost around 25 per cent of their trained apprentices to other firms within five years of apprenticeship completion, broadly the same turnover rate as for tradesmen/women recruited from outside the firm. For those firms incurring a net cost for the apprenticeship period as a whole, retention of the fully trained apprentice for some years may be necessary merely to recoup costs, let alone register a return on their investment. It is difficult to specify what on average the minimum period might be, since this involves estimation of the productivity contribution of a fully qualified tradesman/woman.

A firm providing training in the higher skill trades, especially the industrial trades, faces a high risk of losing its trainee apprentices or tradesmen/women because of two factors: the transferable nature of the skills and the highly fragmented nature of industries utilizing the skills. As the MEMAC submission to the Allmand Committee (1980) pointed out, some of the key industrial trades such as metal machinists are employed not only in the metal machinery and equipment manufacturing sector but also in a wide range of other metalworking industries such as automobile manufacture, auto parts, aircraft, farm implements, transport equipment, general manufacturing, and the maintenance operations of the major resource exploitation industries, such as forest products, mining, petrochemical and energy production.

Moreover, these industries comprise large numbers of firms, with substantial wage differentials between the training firms (typically the lower wage and smaller-size firm) and non-training or "poaching" firms (often the larger-size firms with presumably greater scope for achieving economies of scale in trades training but with a tendency instead to recruit already trained workers by means of high wages. In the machinery and metals fabricating sectors of the manufacturing industry, there are nearly 6,000 establishments employing almost 250,000 employees, and over one-half of these establishments employ less than 20 persons (see Table 9-6).

The provision and financing of transferable skill training or general training by individual firms in the case of higher skilled trades stands in sharp contrast to the public sector funding of a wide range of other forms of general training, much of it provided in public educational institutions.

For private sector employers the implication of expanding the domestic supply to compensate for reduced supplies from overseas sources is the imposition of training costs previously borne by the overseas training systems. These costs are being increasingly transferred to the Canadian private sector. Not surprisingly, employers have queried the equity of providing extensive public sector financing of training for some other skills while the private sector is left to finance industrial skills training.

Just as the equity and efficiency of current methods for financing skill trades training have been questioned, so also has the equity of current access to trades training and employment. The fact that the training system for these skills is located predominantly in industry also contributes to a relatively greater inequality of access to training and employment opportunities in this occupational area than in other high skill occupations.

Access to training is limited in the first place by the total number of apprenticeship or other training places offered by employers. Because the number of places fluctuates with the economic cycle, training opportunities are influenced by economic conditions in a way which does not apply to institutional training for other high skill occupations.

Further restrictions of access to skilled trades training also arise because of the nexus between training and employment in these skills. Canadians living in some regions of the country are more restricted in the opportunity to train for the skilled trades because of regional differences in industrial structure and in the willingness of employers to offer training places. These inequalities

Table 9-6

Number of Establishments and Employment in Selected Manufacturing Industries, by Employment Size of Establishments, 1978

Firm size (no. of employees)	Industry					
	Primary metals		Metals fabricating		Machinery	
	No. of establishments	Employment (^{'000})	No. of establishments	Employment (^{'000})	No. of establishments	Employment (^{'000})
0-4	67	0.3	1097	2.1	220	0.4
5-9			808	5.3	166	1.1
10-19	183	7.2	913	12.6	214	3.0
20-49			960	29.5	342	11.0
50-99			594	54.9	295	28.3
100-199	64	9.4				
200-499	43	12.8	96	28.0	58	17.1
500-999	25	16.8	28	20.3	28	25.4
1000 +	20	71.9				
Total	402	118.4	4496	152.8	1323	86.4

Source: Statistics Canada, Manufacturing Survey 1978, unpublished data.

of access may be further compounded by regional differences in the severity of cyclical fluctuations.

Access to training places provided by employers is difficult for certain groups in the labour market. In unionized areas of employment, for example, collective agreements often specify not only union membership but also seniority as a basis for entry to apprenticeship openings, rather than merit or aptitude (as measured by proficiency testing). It is arguable that this practice is inefficient because it may not permit the selection of the best qualified trainees and may therefore impose higher training costs on the employer and may deter some employers from even offering apprenticeship training. A further problem is that this practice preserves traditional occupational patterns and makes access difficult for women, Native people and other groups. As noted in Chapter Six, the difficulty faced by these groups in gaining access to apprenticeship training is due partly to systemic discrimination and cultural attitudes of employers. But it also reflects substantive economic considerations which apply in the case of industry-based training. The impact of these considerations may have a greater impact on these groups, but are valid for all trainees.

Industry-based training means that the provider of training is not affected by the productivity of the trainee. Because apprentices in training are paid a wage (since they are also in employment), employers are obliged to take into account the productivity potential of prospective trainees. Where this potential is assessed by the employer as low or uncertain relative to wages and other training costs, the prospective trainee will not surprisingly have problems gaining access to training.

As this examination of trades training arrangements in Canada has shown, there is no single simple explanation for present shortcomings in terms of securing an adequate supply of high level trades skills, nor in allowing all Canadians equal access to training opportunities. A common thread, however, is the on-the-job nature of training for these skills which contributes to the problem of instability of training due to cyclical swings, the high costs and risks of investment in training, and the difficulties of gaining access to training.

The Federal Government Response

The fact that there is no single simple problem in this segment of the training system suggests that there is no single simple remedy. The preceding analysis in fact suggests the need to move on several fronts to encourage expansion and stability in the domestic training system and to promote greater equality of access to training and employment opportunities in the skilled trades.

The question we now turn to is what are the most appropriate policies for the federal government to adopt in order to achieve these objectives.

One option which has been proposed as a means of encouraging more firms to train for the skilled trades is a levy/grant system. Important organizations in the private sector have in fact proposed that the federal government should legislate to establish a levy/grant system in each industrial sector where skilled trades shortages are a problem.

The levy/grant mechanism seeks to increase the total level of investment in general or transferable skill training by removing all or part of the costs of this training from individual employers and having these costs borne instead by employers collectively. The mechanism operates through imposition of a levy on firms employing transferable skills and distribution of the resulting funds in the form of grants to those employers who undertake training.

The rationale for the levy/grant mechanism is that a less than optimal level of investment in training for transferable skills occurs because of the high risk to individual employers of securing an adequate return on their investment in such training. This arises from the "poaching" behaviour of some employers who do not themselves train but instead opt to recruit trained workers from training firms, deterring other employers from providing training.

The levy/grant mechanism, by forcing non-training firms to compensate training firms, provides an incentive to the former to undertake training for their own needs and the latter possibly to train beyond their own needs.

At first glance, a levy/grant system appears to have much to recommend it. But as shown in Appendix B, which reviews the British experience with a levy/grant system, there are serious limitations to its effectiveness as an instrument for achieving an adequate allocation of resources to training. It does not address the problem of instability in the level of training resources which arises from cyclical fluctuations. Its effectiveness in reducing the impact of the "poaching" constraint on investment in transferable skill training is limited because of the difficulties of creating effective financial incentives to train and at the same time ensuring equitable redistributive effects through a levy/grant mechanism.

The necessary conditions for the mechanism to have even a reasonable chance of success — a high degree of homogeneity among firms, and low wage differentials — are not present in the case of some of the most critical trades skills in Canada. Firms which employ these skills are scattered throughout many industries: they vary

greatly in size and skill mix and most of the other variables (such as labour turnover rates) which create problems for the equitable operation of the levy/grant mechanism; inter-firm wage differentials for the skilled workers are not insubstantial; and private sector support for such a scheme is far from universal.

For these reasons, the Task Force has considered that a levy/grant system is not likely to be an effective means of achieving the allocation of resources necessary for training in the higher skill trades in the 1980s. Furthermore, on equity grounds there is little support for a mechanism which requires private employers — albeit collectively — to bear the cost of training for transferable trades skills when the public sector finances other forms of general training.

Equity considerations argue rather for increased public financing of training for these skills. And because financial considerations are significant in preventing further expansion of trades training by employers, there is in fact a strong case for increased public funding to tackle this and the range of other problems identified earlier:

- to reduce the current disparity between the costs and benefits to individual employers of providing on-the-job training;
- to reduce the impact of cyclical swings on the stability of training;
- to improve the quality of on-the-job training; and
- to promote greater equality of access to trade training.

There are basically two possible approaches for the application of public funds to alter the benefit/cost ratio of on-the-job training: reducing the costs of training through provision, for example, of direct subsidies to employers (such as those currently provided under CMITP and CTST), and increasing the productivity of trainees during the period when productivity is low relative to wages and other costs, in order to reduce the payback period.

One means for achieving this increase in initial productivity would be through provision of intensive off-the-job training prior to or early in the apprenticeship period. This pattern of early intensive training has long been a feature of trades training systems in Western Europe, from which Canada has drawn so much of its current skilled trades labour force. Thus in West Germany as far back as 1968, some 70 per cent of apprentices in the engineering industry were spending up to six months in off-the-job training in the first year of apprenticeship. Similarly, in Great Britain by 1968/69, some 75 per cent of apprentices in the engineering

industry were trained off-the-job for the first 12 months of apprenticeship, either in industry training centres (operated by the Engineering Industry Training Board), in-plant training centres or technical colleges. In the larger engineering firms, apprentice training had shifted almost exclusively to this pattern — in firms employing 250 or more persons, 90 per cent of first-year apprentices were trained off-the-job.

A recent OECD review (1979) of apprenticeship systems in Western Europe and English speaking OECD countries and, more recently, a 1980 OECD Conference on Apprenticeship identified the trend towards increased provision of this form of training as one of the major developments in apprenticeship in the OECD area. A characteristic of this form of training is its emphasis on practical skills training, even when provided in educational institutions. A measure of the significance of this development is to be found in the OECD review, in which the authors conclude that “the assumption that all or most of the practical training will occur on the employer’s premises is no longer valid” (p. 42).

The OECD review identified two major forms which this development has taken. The first is generally based in the formal education system and involves either a prolongation of schooling or an introductory trades course, often for groups of trades rather than a specific occupation. Trainees in these courses frequently are undergoing trades training without being apprenticed to an employer, and in some cases may not spend any worktime at an employer’s premises during the training course, usually of one year’s duration.

The second form involves full-time training in special centres for persons already apprenticed to an employer. These centres include group training centres established for an industry, a group of occupations, a group of firms, a region and also in-plant training centres operated by individual firms separate from the regular production process. The OECD review commented that in the first year of training especially, the tendency is for apprentices to spend a continuous period in such centres, up to the full year.

Countries which have introduced or recently expanded either or both of these training methods include West Germany, Great Britain, Ireland, France, Denmark, and Australia. The following examples illustrate the extent of the development in these countries (in addition to the German and British data provided above).

- In France in 1979, 40 per cent of all first-year apprentices had completed a pre-apprenticeship year (operated in the context of compulsory schooling).

- In West Germany (according to the 1977 OECD Review) growth of training centres in 1973-81 was planned to more than triple the number of training places provided, from 23,000 to 77,000 or nearly 16 per cent of the total annual apprenticeship intake (all occupations) with a further 16 per cent in pre-employment trades training (with emphasis on the skilled metal trades). The federal government shares the funding of these centres with the private sector.
- In Ireland in 1979, 60 per cent of first-year apprentices received full-time off-the-job training (averaging 40 weeks) and a complete changeover to this new system by 1981 is planned.
- In Australia, pre-apprenticeship trainees increased in 1976-80 from less than 2 per cent to around 12 per cent of the national annual apprenticeship intake (20-30 per cent of some state apprenticeship intakes), with emphasis on the metalworking and automotive trades, and the federal government here also contributes to funding of off-the-job training in industry.

By comparison with conventional on-the-job training methods, the effectiveness of intensive initial off-the-job training in producing productivity improvements in trainees has been demonstrated. In the United Kingdom, productivity gains of 40 per cent or more through off-the-job training methods introduced by the Engineering Industry Training Board were not uncommon. The introduction of first-year off-the-job training for engineering apprentices led to a reduction from five to three years in the time generally required for trainees to reach the skill levels of a qualified craftsman. An Australian study of metal trades apprentices undergoing intensive off-the-job training in a firm's training centre indicated productivity levels after 12 months equivalent to third-year apprentices trained through normal methods and receiving third-year apprentice wage rates (about 75 to 80 per cent of those of a qualified tradesman).

In the case of pre-apprenticeship training in educational institutions, the international evidence is more indirect and varied. Nevertheless, some inferences may be drawn from behaviour of employers in recruiting pre-apprenticeship trainees. The acceptance by employers of this form of training has been uneven, generally, in its early years. This appears partly to reflect dissatisfaction with the practical skills competence and production speeds which institution-based trades training imparts. This certainly was the experience in both West Germany and Australia, for instance.

But two aspects of the recent Australian experience with pre-apprenticeship training are noteworthy. First,

between 60-70 per cent of pre-apprenticeship trainees are subsequently successful in finding apprenticeship, usually at second-year apprentice wage rates (sometimes third-year) and with a reduced apprenticeship term. This implies that employers consider their commencing productivity either equal to a conventionally trained second-year apprentice, or alternatively lower on commencing but worth the investment risk even with a shorter period in which to recoup costs. When it is further noted that pre-apprenticeship trainees initially were drawn from those young people who failed to find an employer willing to apprentice them (i.e., the bottom of the queue), the impact of the training in increasing their attractiveness to employers is more significant.

Secondly, a trend has now developed for employers to recruit pre-apprenticeship trainees in preference to other apprenticeship applicants. This partly reflects improvements which the educational institutions have progressively made to the practical skills content of the training, so that this training now has undisputed benefits in terms of raising initial productivity levels.

Both forms of off-the-job trades training — in industry and educational institutions — are currently provided to some extent in Canada, the former mainly within individual (larger) companies and apparently in the context of a company's own apprenticeship program. Under CMTP in 1978-79, some 5000 trainees took institution-based pre-employment training in courses allotted to CTST occupations. Although some criticism has been levelled at particular pre-apprenticeship courses by employers either for course content deficiencies or for unfairly raising the expectations of course participants for apprenticeship, others are in favour of their expansion, e.g., in certain construction trades. Not all assessments have been unfavourable. As a recent evaluation of an Ontario pre-apprenticeship course in the automotive trades indicates (OECD, May 1980), these courses are equipping participants with high levels of productivity of greater value to employers:

After eighteen months in this program, the pilot apprentices appear, on average, to be performing in terms of productivity at a level close to the traditional apprentices who have been in the program twice as long.

The trades training arrangements in Canada (and the environment in which these operate) are not identical to those of Western Europe or even the rest of the English-speaking world. European apprenticeship systems have generally a much larger role in their societies and are as much institutions for regulating the entry of young people into society as they are training systems for skills. The skill training through an apprenticeship system of adults with extensive work force experience, as in

Canada, is virtually unheard of and positively inhibited in some systems as for example in Great Britain.

Nevertheless, the Task Force considers that there are good reasons why Canada should look to developments in trades training systems abroad at the present time when the need is to shape training systems appropriate to the demands of the 1980s. The skills required are generally common to most industrial countries, most of which have longer experience in training for their own needs in these skills and have devised more efficient methods for doing so.

The developments described above are significant for Canada in several respects. They indicate that the shift of initial training in the skilled trades away from its traditional on-the-job location is a world-wide trend. Common trends include the acceptance of some financial responsibility for provision of this training by governments at all levels within federal systems, whether in the secondary or post-secondary education systems or in industry; and the attempt to shift some portion of skilled trades training out of the wage relationship required by on-the-job training, to minimize the problem of public subsidies accruing to individuals undertaking general training without forgoing earnings as do others undertaking general training.

The Task Force considers that further careful development and expansion of off-the-job training facilities both in industry and the post-secondary education system, along the lines of those developed in overseas systems, is desirable as a means of reducing initial training costs relative to productivity and encouraging greater overall investment by employers in trades training. Those facilities provided in industry need not be entirely separate from the production process but should be organized to reflect the objective of providing intensive rather than sporadic training.

As noted above, in many countries some elements of preparatory skilled trades training have been shifted into the secondary education system. This has already occurred in Canada in at least one provincial school system.

The role of provincial secondary education systems in preparing young people for employment in the trades is beyond the terms of reference of the Task Force. It is noted, however, that there is considerable community support for greater provision of preparation for later skilled training in secondary schools. Such a move would also be consistent with two broad themes of this chapter — that adjustments are required of the education and training system as a whole to meet the demands of the 1980s, and that all parties involved in the system

can and should play a part in meeting the collective goal.

There are also other grounds for supporting the development of these facilities. Because the problem of instability of on-the-job training capacity arises from cyclicity, there is a need for creation of a training capacity more insulated from demand fluctuations.

The development of off-the-job training facilities would help meet this need as well. The decline in provision of on-the-job training during cyclical downturns means that training costs rise with the lower volume of output and that uncertainty as to future skill requirements increases at such times. It also reflects that the nature of on-the-job training involves production of goods or services to meet demand. If demand declines, then production declines and with it the opportunity for on-the-job training.

To provide an effective counter-cyclical training resource, off-the-job training facilities in industry must be predominantly structured in accordance with the training objective. Training facilities which are so inextricably locked into the production process that they are no longer available as training resources when production declines would not meet the criterion of independence of training capacity from demand fluctuations.

Finally, the development and expansion of off-the-job training facilities would also help serve the objective of promoting greater equality of access to training and employment opportunities in the skilled trades. Their availability to target group members as a means of acquiring a productivity "rating" and, equally important, as a means of demonstrating achievement of performance standards necessary to make the next step to on-the-job training, has considerable potential.

In summary, although the Task Force recognizes that development of off-the-job training facilities is not a simple panacea, it is desirable on several grounds related to the training policy objectives proposed for the federal government:

- to help promote expansion of skill training by increasing initial productivity of commencing apprentices;
- to help improve stability of resources available for training by creating a segment of training capacity permanently insulated from demand fluctuations; and
- to help promote greater equality of access to trades training and employment opportunities by use of pre-employment training for currently excluded groups, notably women, Native peoples and the regionally disadvantaged.

There remains the issue of the on-the-job component of training. The past dependence on overseas training systems for supplies of higher skill workers, especially in the industrial trades, has not surprisingly left Canadian industry underdeveloped in terms of the quality and efficiency of training provided on the job. There are two aspects here — the actual methods of skill acquisition during on-the-job employment and training, and the integration of this with off-the-job training, including the obligatory institutional component of apprenticeship.

There is little evidence that structured programs of on-the-job skill acquisition are widely practised in industry or that careful attention is devoted to integrating the contents of the institutional and on-the-job components of training. Yet both could contribute to earlier acquisition of skills by trainees and hence improve productivity.

The expansion of the domestic training system in the 1980s carries with it the need to improve efficiency of skill acquisition systems, and both aspects mentioned above. The proposed expansion of off-the-job training made in this Report makes the need for integration even more important.

Implications for Federal Policy

The preceding analysis indicates that more resources will need to be allocated to the domestic system for higher skilled trades, especially the industrial trades, and that greater stability is also needed in resources allocated.

There is a strong case for increased federal contributions to the resources needed for training in this area on several grounds. Many of these skills are of national importance in the sense of being critical to expansion of output and employment. Even shortages that are small in terms of absolute numbers can seriously affect industrial output.

There are sound reasons on efficiency grounds for increased support. The overall level of investment by individual employers in this form of training is likely to be less than optimal, both persistently and cyclically, because of the high cost and risk of such investment, and instability in the volume of training due to cyclical fluctuations in aggregate demand. There is little evidence to support the expectation that cost-sharing mechanisms such as a levy/grant system would be effective in promoting an adequate level of investment in trades training by private employers.

Much of the training which employers provide in these occupations is in fact general training in the same way as that provided entirely in the post-secondary system, which benefits all employers utilizing highly

qualified occupations, and that provided under CMTP/CMITP for lower level skill training. Although the federal government also supports trades training, the degree of support is much less and is heavily concentrated in the institutional rather than on-the-job component of apprenticeship training. There is thus a case on equity grounds for increased federal support for training in these occupations to reduce the disparity between the level of public support for different classes of general training and for skills of use to different classes of employers.

Finally, equity considerations of another kind are also relevant to the issue of federal support for trades training. Access to training and employment opportunities in the skilled trades is not available equally to all groups in the labour market, for instance women, Native people and persons living in regions where industry-based training is not available. This contrasts with access to institution-based education and training, and partly reflects that trainee productivity considerations are relevant to training provided by employers but not by institutions.

The preceding sections also identified the following developments in the skilled trades training system as those to which increased resources need to be allocated.

- Off-the-job training facilities, generally separate from the normal production process, should be developed in either private industry or public educational institutions such as community colleges.
- Measures should be taken to maintain intakes and retain trainees during times of cyclical downturn.
- The efficiency of the on-the-job component of apprenticeship training should be improved.

The federal government should promote the development of off-the-job training facilities in partnership with provincial governments and the private sector through thrust funds to facilitate expansion of facilities at technical colleges for pre-employment and pre-apprenticeship courses and at industry-based training centres. While the Task Force has not proposed any compulsory levy/grant arrangements, it would of course be open to industry associations to raise funds for these centres through a levy on its own members. The recently announced (April 1981) feasibility study of a national training centre for the aerospace industry is very much in line with the direction proposed by the Task Force. Funding of technical colleges should be conditional upon employer assessment of the adequacy of course content and curriculum, to ensure that training is kept relevant and meets adequate performance standards.

The federal government can intervene to minimize cyclical reductions in training effort through increased

use of off-the-job training and increased funds (subsidies) to raise intakes and retention in downturns. The AOT Act should be amended to allow federal funding of courses up to 104 weeks in duration, and training allowances should be increased in times of cyclical downturns.

To assist firms in upgrading the quality of instruction provided on-the-job, there should be encouragement of improved industry-based training by provision of industrial training extension services. This should be done by the provincial departments responsible for apprenticeship and by agreement could be carried out by the training branch of CEIC.

To promote a rapid and sustained increase in the number of employers providing training in the critical trades skill, the federal government recently introduced the CTST program. Early take-up by employers in 1979-80 was less than expected, and more recently the level of financial assistance available under the program has been increased substantially to encourage greater participation.

If difficulties with the program continue, the federal government should consider an alternative approach. One possibility which has the great advantage of a relatively low level of administrative complexity is the provision of subsidies in the form of a single lump sum payment or bonus to employers commencing training in these skills over their previous efforts. This bonus subsidy would be paid in the first year of training, the least productive and most wastage-prone period for apprenticeship training, and would be subject to retention of the trainee by the employer for a specified period. The subsidy might be repeated in the second year if necessary to sustain training. If adopted, such a program should run for only a short and specified time, say three to four years.

While immigration would not be a prime source of supply of industrial tradesmen in the 1980s, the cyclical nature of demand in Canada implies that some immigration during periods of extreme demand will continue to be necessary to facilitate economic growth. Clearance for overseas recruitment should be given only to firms with training programs geared to meet their normal requirements. The following chapter considers these immigration issues in more detail.

Finally, apprenticeship in Canada is a provincial jurisdiction, in which labour and employers participate and determine critical aspects of the training system. The adjustments required of the apprenticeship system in the 1980s can only occur with the active co-operation and support of this partnership. The federal government ought to be prepared to play its part but cannot and should not do so alone. Achievement of the goals of

policy in this area will require intensive and close co-operation. The federal government can point the way but collective action is needed to achieve success.

Provision of Low and Middle Level Skill Training

The federal government provides training under the AOT Act for the range of skills from entry level to low and medium levels. Two methods are used: institutionally based training and industrial on-the-job training.

In Canada, training at the lower skill levels has had a much stronger institutional orientation than in other OECD countries. Industrial training was increased in the mid-1970s in response to skill shortages which developed as immigration of skilled workers became a less reliable source of supply, but industrially funded training programs still represent only 15 per cent of total training dollars.

Entry-level skills or preparatory kinds of training are required for some individuals to provide access either to jobs or to more advanced training. For certain groups, educational disadvantages, lack of career models in the community, and systemic barriers have resulted in a pattern of low labour force participation, high unemployment and heavy concentration in unskilled jobs, as noted in Chapter Six. Both institutional and on-the-job programs geared to this problem form a very significant part of total government involvement in skill training. The thrust of training for the 1980s is to have training more related to labour market needs. This thrust, coupled with such employment services as pre- and post-counselling and progressive employment practices programs, are seen as important means of training target group members. Because the service sector contribution to employment growth is projected to fall during the 1980s and this sector has absorbed the large growth in female participation in the past, it is important that women's concentration in service sector occupations decrease. The entry of women into non-traditional occupations is of critical importance in the decade ahead. Training is a prime means of decreasing the occupational concentration of women in a limited range.

The discussion in this section is divided into two parts; institutional classroom training and industrial on-the-job training.

A. Institutional Classroom Training

Institutional classroom training under CMTP for the low and middle skill level is divided into two main program elements—skill training and academic upgrading training. Skill training in 1979-80 provided entry-

level training and vocational preparation for 72,000 full-time trainees and cost approximately \$215 million. Academic upgrading (BTSD), work adjustment training and basic job readiness training (BJRT) are all designed to provide the general academic upgrading necessary to facilitate entry to skill training and/or jobs. Some 36,000 trainees were enrolled in BTSD, at a cost of \$83 million.

Skill training is intended to be geared to occupational skills required in the labour market. Most training is in four occupational areas: clerical and related occupations; product fabricating, assembly and repair; construction trades; and machining and related. Most courses are at low skills levels. Little training is provided at the middle level of technician/technologist. (See Appendix C for program details.)

In 1977, the Department of Employment and Immigration and the Treasury Board Secretariat published a joint evaluation of the training programs under the AOT Act and considered the impacts and future direction of the training programs after a decade of operation. While some aspects of program evaluation imposed constraints on the evaluation, discussed in Appendix C, the evaluation did not provide information on how well the objectives of the program were met but did indicate areas of needed change.

In looking at both skill training and BTSD, the evaluation identified a number of dimensions of the program which required change and noted in particular the high concentration of training in a limited range of relatively low skill occupations. The evaluation called for a strong re-emphasis on the development of skills required by the economy as the objective of all federal training.

Consistent with this strong focus on training to meet skill needs, the evaluation recommended:

that the achievement of training objectives be the first priority for each training program and that manpower training not be used for short-term income redistribution among provinces, income maintenance, or for achieving temporary reductions in the measured unemployment rate. Allocation of training funds to provinces should be based on analyses of expected employment opportunities in occupations requiring training, taking into account expected supplies of trained labour from other sources.

This central theme of gearing training goals more directly to meeting skill needs was reflected in the evaluation's recommendations regarding individual training programs. It was recommended, for example, that expenditures on institutional skill training be

geared directly to current and anticipated employment opportunities, and that purchases of BTSD courses be more closely related to skill training and direct job placement opportunities.

These recommendations were intended to improve the capacity of the training program to identify and respond to perceived skill needs. These included specific recommendations that the private sector (i.e., employers and labour organizations) be directly involved in the identification of provincial level training needs and that provincial authorities responsible for economic and labour market policies be more deeply involved in the negotiation of federal-provincial training agreements.

As a result of this evaluation, a number of policy changes were approved by Cabinet and embodied in federal/provincial agreements from 1977 to 1981.

As results of these adjustments indicate, the programs' involvement with clients under 21 has been reduced, with a phasing down of lower level BTSD (up to grade 8). However there has not yet been a corresponding expansion in job readiness training, and BTSD enrolment at grade 11 and 12 levels appears to remain high. Moreover, preliminary information with respect to the flows from BTSD to skill training, covering the first year of the agreement period, indicates that while there has been some progress the proportion of trainees has remained low at approximately 25 per cent.

Regarding reallocation, the federal government was able to secure agreement in principle by the provinces that funds should be allocated based on employment growth and rectifying former disparities. However, the combination of support for a gradual approach and negotiations based on the allocation of only incremental funds meant that the actual degree of reallocation was very limited. (A more detailed account of the background to these adjustments is contained in Appendix C.)

Another evaluation of the institutional training program is underway and to be completed by summer 1981. It involves a 12-month follow-up of 1978-79 trainees. Early results indicate employability gains in all regions. A larger proportion of trainees in Ontario and further west were employed in the year after training. There were increases in weekly earnings across all regions, with the greatest gains made west of Manitoba. Differences persisted in the effectiveness of training for men and women. Women made slightly higher gains in employability, although there was considerable difference in the proportion of time they were employed in the year after training. That is, a considerably smaller proportion of women were employed in the year following

both BTSD and skill training. Women also experienced a slightly smaller increase in weekly earnings.

Early indications show no improvement in the success of the program in terms of the number employed after training. Unfortunately, there are not enough data to assess the most recent program experience or to indicate what changes have occurred since the 1977 evaluation.

Issues and Concerns

The concentration of training occupations within a small number of occupations and the generally low level of the training pose problems for meeting the skill needs of the 1980s. The funding structure of training agreements, which give the provinces a minimum guaranteed amount each year, leaves little flexibility to the federal government to meet changing skill needs. The federal/provincial Manpower Needs Committees have limited employer input to their planning of training needs decisions. In addition, there are a number of other issues relating to institutional training.

Generic Skill Training. A number of provinces are using the concept of generic skills to increase occupational mobility. The objective of the generic approach is to group together the skills common to a variety of occupations so that a large part of training can be applied to many kinds of jobs and graduates will be able to adjust to changing skill needs with a minimum of retraining. Ontario and the Maritimes have made extensive curriculum changes as a result of generic skill studies. Quebec has altered its vocational high school programs and the complete curriculum for one school in Edmonton has been revised using a generic skills approach to make their students more job ready. Similar adaptations have been made in training programs in other countries. A study by Arthur Smith, commissioned by the Task Force, examines generic skill training in further detail.

Educational Leave. A study of educational leave completed in 1979 by the Department of Labour (Adams, 1979) found that leave varied in duration from day release to extended leave. Funding systems varied as well. Day release usually involved full pay. Some employers contributed equal time for employees taking training, or provided partial pay, allowances in lieu of pay, part or all of tuition.

The Commission found that because of continual changes in technology, legal requirements, and the state of knowledge in many occupations, people require continuing education throughout their working life. While many programs are designed to meet this need, the study found general agreement that current programs

are inadequate. In addition to persons requiring upgrading of professional skills, there are many thousands of employees requiring periodic upgrading to prevent deterioration of their skills. Evidence presented to the Commission indicated companies using equipment that was out of date, presumably partially attributable to a lack of knowledge about modern techniques. For these reasons the Commission strongly supported various forms of educational leave.

The Task Force found one of the Commission recommendations of particular interest — the establishment of a registered annual leave plan modelled on currently existing Registered Home Ownership Savings Plans and Registered Retirement Savings Plans. Considerable support for such a plan was indicated by employer organizations, worker organizations and educators. Employees could be permitted to deposit some non-taxable amount of savings into a Registered Educational Leave Plan each year. The Task Force regards this idea as one worthy of more detailed study to establish parameters and costs.

Academic Upgrading. A third issue is how best to provide academic upgrading skills. The training programs that have been the most successful in providing a bridge to stable employment (e.g., AMOK, Syncrude, Nortran and New Careers) are those in which the academic upgrading has been directly linked to jobs. Training has been aimed at skill development and work adjustment for those unable to obtain entry-level jobs. This approach to training appears to be gaining momentum. For example, the Nova Scotia government and regional CEIC officials have been operating concurrent education programs in which trainees learn on-the-job the basic academic skills needed for skill training. A similar program exists in Ontario. Manitoba is developing the concept of semestering — i.e., providing periods of work in conjunction with upgrading training — for Native training programs. Some adaptations in CEIC operational procedures will be required to accommodate the flexibility of this approach.

Further evidence of the success of linking upgrading to skill training and work experience is provided by the related example of the Manitoba program of teacher training for mature students in northern communities. Most of these students lack the academic prerequisites and take high school level courses in conjunction with the university courses. It was found in evaluating the program that those who received academic upgrading while following their university courses were more successful than those who began university after completing academic upgrading. The relevance of upgrading to another set of goals, e.g., teacher training skills or

on-the-job skills, is seen as an important key to the success of the upgrading programs.

Advisory Councils. A fourth issue relates to the need for advisory groups as vehicles for joint planning by governments and industries to adapt the training system to meet changing skill needs. These bodies could be a part of the revised Local Manpower Needs Committees and the recommended Regional and National Industrial Manpower Committees, described in Chapter Five, consisting of representatives from firms, industry associations, unions and federal and provincial officials. CEIC's recently announced aerospace committee of senior executives from the industry to advise the Minister on the feasibility of establishing a national aerospace training centre in Winnipeg is an example of such advisory councils. In addition, they could be involved in research and planning related to changing skill requirements and technological changes in the workplace and could provide a link with career planning in the secondary school system.

Technological Change. Technological advances and related skill demands will generate a number of training needs with particular impact on women, because of their concentration in secretarial/clerical occupations and in the finance and insurance industries. The rate of diffusion of the technological changes and the extent of adverse impacts is the subject of much debate.

The recent study of the impact of the micro chip and office functions mentioned in Chapter Six (Menzies, 1980) states that information diffusion could reduce demand for bank tellers, cashiers and other clerical workers to between one-half and two-thirds of the current number by 1990. The remaining jobs will require higher qualifications which will pose a mobility problem to those displaced. This suggests a need for high technology re-training programs for workers in these occupations.

Policy Implications

Current methods of seat purchase for institutional training with the minimum guarantees make it difficult at best for the system to be responsive to labour market needs. The Task Force therefore recommends that a variety of funding mechanisms be developed to make the system more responsive to actual and forecast demand for skills.

Some base funding by purchasing institutional seats for skill training should continue. But we suggest that all training through institutional funding should meet the following conditions.

- Skill training funds should be directed towards occupations in high demand with existing or poten-

tial shortage. In the 1980s most of these will require higher level skill development. Since this suggests a need for more extensive training, the training period should be extended beyond the current 52-week time limit to permit up to two years (104 weeks) of training.

- All training should provide to the fullest extent possible skills which are transferable across occupations.
- Training funds should be directed to areas where there is a demand for the skills. The redirection of funds to areas of high demand may mean decreases in training funds to some low-demand areas, which should instead receive economic development funds. This change would stress training as a supply tool, with economic development as a means of achieving improvements on the demand side.

The Task Force notes the need for a mix of funding mechanisms to meet the various training needs of communities and individuals. In addition to courses purchased in institutions, training dollars should be available to provide grants to employers for the training and retraining of semi-skilled and skilled workers. This would enable them to move to growing industries and occupations and to assist those whose skills have become redundant, preferably before or immediately after layoff. These grants are a form of adjustment assistance, discussed in Chapter Eleven. Clearly such a grant scheme could work only with the close cooperation of industry and federal and provincial governments.

It is the view of the Task Force that target group members who have difficulty gaining entry to stable employment can be helped most by measures which include actual work experience. Therefore, the primary emphasis should be to place people in productive employment, as noted in Chapter Six. To facilitate a direct relationship between academic upgrading and skill training on the job, funding of BTSD courses should be changed from an institutional to an industrial on-the-job basis. A gradual phasing-out of the current method is needed to minimize disruptions for training institutions. Training for such equity programs would continue but through a different funding and training system. Trainees and employers would receive grants and allowances to permit academic upgrading in conjunction with on-the-job skill training. It is suggested that CEIC's wage subsidy program, which has provided assistance for the disabled, be expanded to include other groups. Many trainees in these on-the-job courses have failed to acquire basic academic skills in the provincial educational system, and this may act as a barrier to employment. The provinces should be encouraged to accept responsibility in this area.

Pre-trades courses for women should be continued to provide practical experiences in a variety of trades to assist their entry into trades. This training should gradually be linked to trades training, with its greater institutional emphasis, as discussed in the previous section. As noted in Chapter Six, an affirmative action strategy is needed to widen the range of occupations for female trainees.

Technological change, particularly in the office area, will require a number of strategies with regard to secretarial/clerical occupations in finance, insurance and other industries. Educational leave provisions would give clerical workers opportunity to develop higher technological qualifications. Affirmative action programs would increase opportunities for women, who make up the bulk of clerical workers. Other strategies are needed within the affected industries to provide bridging positions to facilitate the movement of clerical workers from their short career ladders to the longer career ladders of other occupations.

- These would include training, a period for learning on-the-job and regular assessment of progress. Industry Training Councils would be of great assistance in developing such programs.
- Commercial courses in secondary and technical schools must become more responsive to the technological changes in the 1980s. More than minor changes to existing systems are needed. Research is needed to identify the office skills that will be required in the future, and new training programs should be designed accordingly.

B. Industrial On-the-Job Training.

The federal government provides wage reimbursements to employers providing training under CMITP. Training was provided to some 82,000 trainees in 1979-80. It should be noted that this figure includes apprenticeship trainees, and the figures would be somewhat smaller for low and medium level trainees. Training on-the-job amounted to \$109.6 million or about 15 per cent of all training dollars. A more detailed discussion of the program is given in Appendix C.

The most recent evaluation of CMITP provides 12-month follow-up data of 1978-79 graduates of the program. The evaluation results concerned training in demand and shortage occupations; the size of firms doing the training; the degree to which government support resulted in expanded training; and employability and earnings gains of trainees.

The evaluation classified occupations according to degree of skill shortage, based on the Forward Occupational Imbalance Listing, (FOIL). Occupations were

designated as being in demand or in surplus based on the incidence of prevailing skill shortages and an assessment of local conditions by regional economists. Only a small proportion of training (10 per cent in 1979-80) was in shortage occupations. About one-quarter (27 per cent) was in surplus occupations, some of which were identified as being in extreme surplus.

Not surprisingly, the evaluation showed that workers trained in demand occupations had better employment and earnings gains than those trained in surplus occupations. The results show that unemployment was lower for trainees in demand occupations (13 per cent compared to 26 per cent), and that more trainees in demand occupations were employed 12 months after training, (81 per cent compared to 69 per cent). More were employed in the occupation trained for (61 per cent compared to 48 per cent). The trainees in demand occupations experienced the largest earnings gain (36 per cent compared to 25 per cent). Trainees in mining, durable goods, manufacturing, transportation, communications and other utilities showed particularly impressive gains in employment and earnings. The lowest gains were for general training. The evaluation noted that training in demand occupations tended to be less firm-specific, thus enhancing mobility, and was of longer duration.

Aside from demand/surplus training considerations, the overall experience of the trainees in terms of their employment gains showed there was no improvement for trainees who had been employed before entering a training program. There were, however, major improvements for trainees who had been unemployed and for those in special needs groups. Average employability gains of women were significantly below those of men in all the trainee categories both before and after training. Earnings increased for all groups as follows: special needs by 40 per cent, unemployed by 43 per cent, employed by 25 per cent.

Increases varied by regions with the largest average weekly wage increases in Ontario and western Canada. It should be noted, however, that the increases cannot be totally attributed to CMITP. In the two-year period ending April 1980, the average industrial wage increased by 15 per cent. In addition, the work experience trainees received under the program may in some cases have been more important than the training itself.

Post-training employment gains were lowest for those in programs of shorter duration, and fewer of these trainees, surveyed 12 months after training, were employed in the occupations trained for.

Employers were asked what alternative course of action they would have followed without CMITP. The

answers provided a direct, though possibly biased, estimate of the effect of government intervention. One-quarter of employers stated that they would have provided exactly the same training to the same number of employees. These were mostly the larger employers. Twenty-eight per cent indicated that either the number of trainees or the amount of training would have been reduced. Eighteen per cent of employers stated that they would have hired qualified personnel instead of training. The survey indicated that this may reflect training being done in surplus occupations. Twenty-two per cent of employers stated that without CMITP they would have had to either reduce operations or postpone expansion.

Issues and Concerns

In addition to the issues raised in the CMITP evaluation several other areas of concern must be considered in a discussion of on-the-job training. A study of employer training in Ontario (Harvey, 1980) compared training and non-training firms on their views regarding the returns on investment in training, as well as a number of other issues. Most firms engaged in training viewed it as the responsibility of the firm and did not expect government involvement. They considered the selection of trainees and the paying of administrative costs to be employer responsibilities. Although 50 per cent felt that employer-sponsored training should provide the employee with portable skills, a substantial proportion of training firms (43 per cent) believed that skills should not be portable. The debate on portability concerns the weighting of long-term benefits against the immediate and short-term needs of meeting production schedules by having the appropriate skills available. The views of the firms engaged in training support the argument that government involvement in industrial training should draw more firms into the training process.

A second issue is variation in the quality of training provided by employers. The current system does not seem to address the issue adequately. Provincial involvement in the administration of federal training funds is directed toward developing a training plan with employers who are applying for federal funds. The employer must have the capability and facilities to conduct the training, and the training method must meet the needs of the trainee. Provincial assistance is provided in developing the plan, and the province monitors its implementation. The quality and quantity of this assistance varies enormously, as does the monitoring, so it is difficult to know how much training actually occurs. Currie, Coopers and Lybrand (1978), in their study of apprentice machinists in Ontario, found that trainers often lacked the ability to define training goals, plan lessons, instruct, coach and measure progress. They

found that instruction was unskilled and would be better termed coaching. Better methods need to be found to ensure good quality of on-the-job training.

A third issue is that for low skill workers, entrants and re-entrants, on-the-job training provides a number of advantages that are missing from the classroom training model. The importance of having a job while training provides psychological as well as economic support. In addition, graduates with both training and work experience are better equipped to compete for employment. The CEIC evaluation study supports this assertion, finding that some of the wage gain seemed to be related to the work experience component of the program rather than the specific training received.

Several issues that were discussed in relation to institutional classroom teaching apply equally to on-the-job industrial training. These issues are the transferability of the skills gained to encourage mobility; the need to ensure that women, Native people and the disabled are trained in a whole range of occupations; and the need for a clearer picture of industrial training demands in the short, medium and long-term to provide for effective human resource planning.

The provision of training in the industrial setting is an area fraught with a number of difficulties that will entail continued experimentation to improve its delivery.

Policy Implications

It has not been clear to what extent training programs through the 1970s have responded to labour market needs rather than to upgrading the skills of the unemployed. Training in areas with few job opportunities is not the answer if training is to provide skills needed in the labour market. In this context, provision of entry-level training in an industrial setting as opposed to strictly classroom training has many advantages in establishing access to employment, particularly for disadvantaged groups. The experience of operating in a work environment is often as valuable as the acquisition of specific skills. To accommodate the upgrading of academic skills on-the-job, the subsidy period should be increased from the current 52 weeks to a potential 104 weeks. The current differential wage reimbursements should be available for the first 52 weeks. These rates are: up to 85 per cent for special needs clients; up to 75 per cent for women in non-traditional occupations; up to 60 per cent for the previously unemployed; and up to 40 per cent for the previously employed. During the second half of training there would be a decrease in subsidies as the degree of disadvantage declines. Although insufficient information is available, it might be that the current 40 per cent reimbursement with 60 per cent for

women, Native peoples and the disabled should be continued during this second year of training.

The provision of low level training should be directed only towards occupations in shortage. The current 52 weeks of training seem adequate in this area, although some flexibility may be needed to accommodate individuals requiring longer training. Differential wage subsidies should be continued to encourage the training of women, Native peoples and the disabled. It is particularly important to decrease the occupational concentration of women by providing them with access to the full range of training courses, and differential wage reimbursements are an important mechanism. There is insufficient information available to assess whether the current wage reimbursement depth is required for this area. One can estimate that 40 per cent is adequate, and that perhaps a 60 per cent rate for women, Native peoples and the disabled might serve as a sufficient incentive. This would need further consideration.

CEIC training programs have devoted few resources to middle level skill training for technician/technologist type occupations. Training at this level is the one area where there is an overlap between the AOT Act and the EPF Act. As Chapter Three indicated, there will be an increased demand in the 1980s for this type of training.

Because this middle level of skill training is of international concern, the OECD organized a meeting on this topic in December 1980. While national definitions varied, a number of common characteristics were identified. The occupations at this level involve theoretical as well as practical skills and require the ability to translate technical or theoretical knowledge into specific action. They also require a capacity for leadership, supervision and organization of other people's work. It was generally accepted that demand for these occupations is likely to expand during the 1980s due to increasing complexity in production technology and increasing high-quality products. In addition, shortages of professionally trained people will create more demand for para-professionals in such fields as medicine, social services, and certain industrial areas such as engineering processes.

No single approach emerged as the best vehicle to increase the supply of these workers over the next 10 years. Some countries would rely on upgrading existing workers from among the crafts (Germany), and others suggested on-the-job training for university graduates (Britain). Representatives from Alberta and Quebec emphasized the use of community colleges and institutes of technology.

To increase the amount of training in middle level skills, it will be necessary to expand AOT Act funding to

104 weeks from the current 52 weeks. The current CTST program should be expanded beyond its trades training focus to include technician/technologist kinds of training, and special measures such as wage subsidy incentives and affirmative action should be made to move target group members into these higher level training courses. Under EPF funding vouchers and loans could be addressed to these kinds of skill areas, as described in the post-secondary education section of this chapter.

The quality of the training provided is a concern at all skill levels. Study and consultation are necessary to devise the means of providing the assistance to employers involved in industrial training. The Task Force does not make specific proposals on how exactly to accomplish this, but national industrial manpower committees, discussed in Chapter Five, could provide a vehicle for reviewing the quality of training. One possible mechanism would be a training "outreach" service to employers to provide training manuals and third-party training services.

Conclusions

The Task Force has reached two general conclusions in considering training to meet labour market needs in the 1980s.

The first conclusion is that the training system at present does not seem fully capable of meeting the demand that will be placed upon it in the 1980s. As the coming decade will be characterized by a shift of skill demand away from service skills towards goods and commercial skills, the training system must gear up to produce more of the latter. However, as there are great uncertainties about the precise requirements during the decade, the system must be adaptable and flexible. More flexibility is required if the system is to meet projected skill requirements and be capable of responding quickly to new and changing demands.

The second general conclusion is that the total size of the current public contribution to the total training system for both post-secondary students and adults is adequate to meet the needs of the 1980s. In fact, a reduced and redirected level of federal funding is envisaged for post-secondary education and low level skill training, with increased funding for middle and higher level skill training. We conclude that a better mix of funding mechanisms and greater financial involvement of the private sector (both students and employers) would result in a more properly structured system, better able to meet the demands placed on it with a smaller commitment of public resources. This would enhance the flexibility and adaptability of the system. A

phasing in approach would be required to accomplish these goals.

At the post secondary level, general institutional base support through the present block funding system should be reduced. Instead a mixture of funding mechanisms to increase the system's flexibility in responding to changing labour market needs is required. To accomplish this, student aid funding should be increased to facilitate access for the disadvantaged or low income student and to ameliorate higher student fees for study in certain disciplines in labour market demand. Cooperative education programs should be expanded. Federal involvement in this joint federal/provincial program could be that of grants to assist with the administrative costs of setting up such programs, particularly to develop an affirmative action plan for women, Native people and the disabled. It could involve some student assistance during the first year to cover the extra costs of enrolling in a cooperative education program; and special grants to employers to hire the disabled, Native people and women in non-traditional areas of work. Thrust funding is required to facilitate expansion of engineering, science, technologies and business training. A system of matching grants to employers is recommended for those employers who sponsor needed specialized training in colleges and universities.

The industrial training system for high skill trades is inadequate, being both fragmented and highly cyclical. In these industries an inadequate flow of new journeymen/women can only be achieved if training is divorced from normal production activity to a much greater extent. This can be achieved through greater use of classroom instruction, more directed instruction on the shop floor and increased use of equipment during cyclical downturns for training on the shop floor. These three innovations should be encouraged by such federal measures as thrust funds to expand the facilities in colleges and industrial training centres, training extension services funding to improve the quality of on-the-job training, and the expansion of funding models like CTST to encourage employers to increase their training in skill shortages. We conclude that these funds should be made available from general revenues rather than from a special levy on employers. By increasing public support for higher skill training while reducing support for post-secondary training, a better balance of incentives for appropriate career selection will be given. More emphasis on pre-apprenticeship courses could efficiently reduce the amount of on-the-job training required in many trades and improve access to the trades to a greater number of young men and especially young women. Courses of this nature should be developed at

both the college and senior high school level over the next decade and apprenticeship programs should be modified to recognize the value of this training.

Middle level skill training for technician/technologist kinds of occupations which will be in demand in the 1980s will require longer training than the current available 52 week limit under the AOT Act. It is therefore recommended that the program be expanded to 104 weeks. Industry should be encouraged to play a much greater role in the design and financing of these courses, facilitated by federal matching of industry grants to colleges and by direct financing of students. In some instances this would replace current seat purchase arrangements under CMTP. For these higher skill courses, the best qualified students should be selected, although preference under an affirmative action program should be given to women, Native peoples, and the disabled.

Resources devoted to low-level skill development in short-term programs under CMTP should be reduced and some funds reallocated to the development of higher level skills in the primary goods and manufacturing sectors. In regions with labour surplus, resources should be redirected from low-level skills training to employment development strategies. In the five eastern provinces, parts of Ontario and Manitoba, the major labour market problem is not skill shortage but lack of demand for unskilled and semi-skilled workers as noted in Chapter Seven. CMITP should be concentrated on the development of skills in short supply. A much greater proportion of CEIC training funds should be directed at training for high skilled jobs. This may include funds for the development of industry-based training centres, and the provision of trainers and training services to industry.

For those experiencing difficulty getting to the first rung of the employment ladder, good job experience is the first requirement. Relatively deep subsidies over a two-year period appear to be the best method of facilitating such experience supplemented by low-level training pertinent to the job. Thus resources devoted to Basic Training for Skill Development (BTSD) under institutional training should be reduced and remaining resources targeted to training required by those receiving subsidized on-the-job training.

The analysis in this chapter benefited from a paper prepared by David Stager, entitled "Federal Involvement in Post-Secondary Education for Highly Qualified Labour," and one by Arthur Smith, entitled "Generic Skills: Improving Transferability in Occupational Training," and from discussions with Noah Meltz and Alan Thomas.

Chapter Ten

Immigration to Meet Skill Needs

We noted in the Introduction our underlying assumption that immigration will continue to be used for specific labour market purposes and that there will be no inclination to utilize this instrument on a large scale as a means of meeting the demand for workers in high growth industries and regions. This means of course that the bulk of this demand will be met within Canada, which implies that Canadians will have to be prepared to respond to the opportunities offered by mobility between occupations, industries and regions.

We begin this chapter with a brief review of some of the post-war history of immigration for labour market purposes and some observations on basic issues for the 1980s. The main issues we see concern identification of the skills Canada will need in the current decade and how they can be obtained on a timely basis. We then outline some basic concepts and terminology relating to Canada's immigration program. These provide a context for the discussion of our estimate of the numbers of skilled immigrants for which room should be made in the annual immigration movement to complement domestic supplies of skilled labour. We then discuss some issues in obtaining the foreign skills needed in Canada in the face of such factors as growing international competition for skilled labour and the complexities of immigration policy and management. We conclude with a brief list of measures which the Government should consider to ensure that Canada can identify its foreign skill requirements as precisely as possible and obtain them on a timely basis.

Basic Issues for the 1980s

Historically, immigration has had an important, many-faceted impact on Canadian society and the economy. For much of Canada's history, large numbers of people were required to develop the land and other resources, thereby contributing both to overall economic growth and an improved standard of living, not to mention our culture and social fabric. This was particularly true of the three decades or so spanning the turn of the century.

But it has also been true in more recent times. Prime Minister MacKenzie King's well-known statement to the House of Commons in May of 1947 declared concisely that "Canada needs population." He described the limits to Canada's needs in terms of the country's "absorptive capacity," an undefined and elusive notion.

The *White Paper on Immigration* of 1966 (Dept. of Manpower and Immigration) continued to reflect an expansionist view of immigration but focused on the need for skilled immigrants to fuel Canada's growing economy rather than on the more general demographic objectives underlying the King statement. The White Paper advanced a number of familiar but not universally accepted arguments regarding the positive contribution of immigration to economies of scale and rising per capita income. The fact that some Canadian workers would be temporarily displaced by immigrants was recognized. The White Paper foresaw a virtually inexorable trend toward growing requirements for ever-increasing skill levels in the labour market and a corresponding decline in requirements for semi-skilled and unskilled labour. Although the White Paper recognized that the modern economy requires large investments in adult education and upgrading the basic skills and technical training of the work force, it also observed that Canada stood to benefit from the importation of professionals and other persons with high level skills by not having to invest in their education and training. The document also recognized that even though Canada could use as many skilled immigrants as could be readily absorbed — to contribute to overall labour force growth — a particularly important role of immigration for labour market purposes would be to relieve bottlenecks in supply.

Changing circumstances at home and abroad influenced the tenor and thrust of the Green Paper published in 1974 (Dept. of Manpower and Immigration), which took a far less expansionist view of immigration than the 1966 White Paper. The Green Paper stressed, for example, the importance of making full use of Canadian training and education establishments.

A specific example of an expansionist tendency in past Canadian immigration thinking is that which ascribes significant benefits to the importation of highly qualified manpower. This view stressed the savings to the economy in terms of the educational investment to which Canada would otherwise be committed. There was certainly cogency in this argument during earlier periods of Canadian immigration history. And no doubt it will remain true in selected instances that an imported expert is "cheaper" than a home-grown one. Considering, however, Canada's heavy investment in its own training and educational establishments, the products of which will be entering the labour force at extremely high rates in the years to come, it is evident that this should become a rarer occurrence, and that the education-savings argument has lost much of its validity as a principle of policy. (Vol. 1, p. 27)

Unlike the White Paper of 1966, the Green Paper reflected a special concern for the demographic impact of immigration. Noting the decline in the fertility rate and the likelihood of its remaining at a low level, the Green Paper foresaw a continuing requirement for immigration even to maintain population levels, much less to increase them substantially. But the overall thrust of the document did not imply that Canada needed population in anything like the numbers implicit in the White Paper of 1966. Indeed, it observed that factors such as cultural balance, urban congestion and geographical distribution deserved special attention in the

context of assessing Canada's absorptive capacity. The current policy of minimizing displacement of Canadians by foreign workers came into effect just as the Green Paper was published.

A series of background studies for the Green Paper relating to the economic and demographic impact of immigration stimulated some related research and public debate. In the absence of adequate empirical data, it is difficult to conclude with any confidence just what sort of economic or social impact immigration may have at any given time or at any given level of intake. In any event the economic and social impact of relatively modest levels of immigration in the order of the post-war average of about 140,000 is extremely difficult to measure.

Immigration can, in principle, be managed to make a useful contribution to the labour market in virtually all circumstances. Since some Canadian labour markets are thin and some swings in demand are not predictable far enough in advance to adjust for them on a timely basis, foreign workers with specific skills are generally needed to prevent bottlenecks from retarding economic development and total employment growth.

Requirements for immigration to satisfy labour market needs in the 1980s are not likely to be high by historical standards (Tables 10-1 and 10-2), although a modest increase over recent levels of labour market related immigration may prove necessary for much of the decade. Thus, we do not expect that immigration for

Table 10-1
Immigration by Class, 1965-1980

Year	Total	Family class		Assisted relative		Independent		Refugees	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
1965	146,758	57,073	38.9			89,685	61.1		
1966	194,743	66,562	34.2			128,181	65.8		
1967	222,876	74,427	33.4			148,449	66.6		
1968	183,974	38,307	20.8	35,040	19.1	110,627	60.1		
1969	161,531	33,548	20.8	39,084	24.2	88,899	55.0		
1970	147,713	32,263	21.8	35,151	23.8	80,299	54.4		
1971	121,900	33,450	27.4	29,328	24.1	59,122	48.5		
1972	122,006	33,019	27.1	30,692	25.2	53,115	43.5	5,180	4.2
1973	184,200	41,677	22.6	44,278	24.0	95,886	52.1	2,359	1.3
1974	218,465	54,232	24.8	53,161	24.3	109,406	50.1	1,666	0.8
1975	187,881	64,124	34.1	45,727	24.3	72,464	38.6	5,566	3.0
1976	149,429	60,830	40.7	32,528	21.8	44,320	29.6	11,751	7.9
1977	114,914	51,355	44.7	26,114	22.7	30,145	26.2	7,300	6.4
1978	86,313	45,540	52.8	17,199	19.9	19,319	22.4	4,255	4.9
1979	112,096	46,763	41.7	11,474	10.2	25,980	23.2	27,879	24.9
1980 ¹	142,634	50,936	35.7	13,406	9.4	38,172	26.8	40,120	28.1
1965-80	2,497,433	784,106	31.4	413,182	16.5	1,194,069	47.8	106,076	2.2

¹1980 data are preliminary.

Source: CEIC statistics.

Table 10-2

Immigrants Destined to the Labour Force by Category of Admission as a Percentage of Immigrants 15 Years and Over, 1965-1980

Year	Total		Family class		Assisted relative		Independent		Refugees ¹	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
1965	74,195	67.5	20,063	46.9			54,132	80.6		
1966	99,210	68.3	23,055	46.4			76,155	79.7		
1967	119,539	69.8	26,222	47.0			93,317	83.8		
1968	95,446	66.5	5,992	23.9	19,069	72.4	70,385	86.0		
1969	84,349	66.7	6,584	28.1	21,924	72.9	55,841	79.9		
1970	77,723	66.7	6,600	29.6	19,633	72.9	51,490	79.2		
1971	61,282	64.2	7,499	32.6	16,853	74.6	36,930	77.3		
1972	59,432	63.0	7,764	33.5	17,562	72.9	34,106	75.2		
1973	92,228	63.6	8,959	31.3	24,152	70.2	59,117	73.4		
1974	106,083	64.5	10,606	29.8	28,030	70.9	67,447	76.9		
1975	81,189	59.8	14,762	32.9	24,321	71.6	42,106	74.4		
1976	61,461	55.2	16,448	35.5	19,850	71.6	25,163	69.6		
1977	47,625	54.3	15,547	37.4	15,372	74.6	16,706	67.8		
1978	35,240	53.2	14,498	38.6	9,937	77.3	10,348	68.4	457	71.4
1979	48,234	57.0	15,380	39.4	6,238	75.7	12,969	69.1	13,647	71.7
1980 ²	63,166	57.3	16,181	36.0	7,182	74.9	19,397	69.6	20,406	71.2

¹Includes "designated classes" comprising persons who do not fit the Geneva Convention definition of refugee but who are admitted on compassionate grounds.

²1980 data are preliminary.

Source: CEIC statistics.

labour market purposes will attain levels which would raise significant new economic or demographic issues.

The main issues are likely to centre around:

- identifying requirements for labour from foreign sources in the light of its availability from domestic sources; and
- obtaining the precise skills Canada needs on a timely basis.

Concepts and Terminology

Before exploring the main issues further, it would be useful to clarify some basic concepts and terminology having a bearing on immigration for labour market purposes.

Immigrants to Canada fall into three basic categories: independent immigrants, family members, and refugees. As Table 10-2 indicates, immigrants from all categories enter the labour force. Indeed, some immigrants from all categories have jobs waiting for them on arrival.

Independent Immigrants

Principal applicants in the independent class are deemed to be able to establish themselves and any immediate family in Canada on a self-sufficient basis. Their capacity to establish themselves without help is evaluated in

terms of selection criteria which take into account a number of factors, including education, vocational preparation, experience, age, and the need for their skills in the labour market. This need is assessed in terms of ongoing measures of occupational demand made by the CEIC.

An independent immigrant who has a job offer validated by the CEIC or is qualified for and prepared to engage in a "designated occupation" is deemed to have skills in high demand. To be validated, a job offer must meet several criteria.

- The wages, working conditions and prospects of continuity must be sufficient to attract Canadian residents.
- There must be no industrial dispute in the enterprise.
- The employment opportunities of Canadian residents must not be adversely affected.
- The person must be likely to meet federal, provincial or other applicable licensing requirements.

In addition, the CEIC generally requires that employers seeking foreign workers have well-developed human resources plans designed to ensure the greatest possible use of domestic workers and thus to minimize future reliance on workers from abroad.

Although spouses and dependants of principal applicants in the independent class are not subject to selection criteria as such, between 5 and 10 per cent nonetheless enter the labour force on arrival in Canada. Virtually all enter occupations for which no specific need has been identified. Principal applicants admitted to fill identified labour market needs are sometimes referred to as "selected workers," while their spouses and dependants for whom no labour market need has been identified (in almost all cases) but who enter the labour force are referred to as "unselected workers." The independent class also includes entrepreneurs, self-employed and retired people.

The size of the independent class varies with changing labour market demand, largely as interpreted by federal authorities — in recent years, essentially the CEIC. The CEIC's interpretation relies primarily on various instruments for forecasting regional and national occupational demand and on contacts and arrangements with employers and unions regarding the importation of specific skills.

In the years 1965-75 the independent class was predominant, almost always comprising more than half of all immigrants in any given year, but by 1979 the independent class occupied less than one-quarter of the immigration intake. Even if the relatively large refugee component of the 1979 immigration movement were discounted, the independent class would have comprised less than one-third of the overall intake in that year.

Assisted Relatives

Assisted relatives are assessed on the basis of a combination of modified selection criteria similar to those applicable to independent immigrants and the willingness of relatives resident in Canada to help them become established. Regulations prescribing procedure at immigration offices abroad provide that all prospective immigrants who are neither family class members nor refugees are to be treated initially as independent applicants. Those failing to meet the overall independent class selection criteria, but having skills in demand and having relatives able and willing to help them become established, may be admissible as assisted relatives. As with the independent class, there are "selected workers" and "unselected workers" among the assisted relatives group.

In terms of size, the assisted relative category tends to have some of the stability of the family class while retaining some sensitivity to labour market conditions. The category, originally called "nominated class," was fairly stable during the years 1968-77, accounting for a little under 25 per cent of total immigration annually.

By 1979, however, assisted relatives accounted for only 10 per cent of the movement. This decline is attributable to a shift into the family class of immigrants who would formerly have been designated as nominated class, after the introduction of the 1978 regulations. Moreover, some of those who might otherwise apply as assisted relatives qualify as independent immigrants because under the 1978 regulations, they are now first screened on that basis.

Family Class

Family class immigrants are essentially close relatives of Canadian residents who have given an undertaking to sponsor them. No selection criteria as such are applied to family class immigrants but over 30 per cent enter the labour market each year.

The size of the family class is less affected by both internal and external conditions than the independent class. The number of family class arrivals is a function of approved sponsorship applications put forward by Canadian residents on behalf of their relatives abroad. The size of the class tends to expand shortly after periods of high independent class and refugee intake, as dependants and other relatives join family members who have become established. In recent years, as independent immigration has dropped sharply, the proportion of overall intake occupied by the family class has grown. A new factor in this growth was the possibility offered Canadian citizens through the regulations made after the proclamation of the *Immigration Act* in 1978 to sponsor parents under 60 years of age. This group currently comprises about 60 per cent of family class intake.

Refugees

Refugees are a special case and include not only persons who fit the definition of "refugee" in the relevant Geneva Convention but also certain other designated groups admitted on compassionate grounds. Labour market criteria are not applied as such in determining their admissibility but are used as a guide in assessing the likelihood of their being able to become established in Canada.

Although there is no way of predicting specific additions to the world refugee population, their numbers will no doubt continue to far exceed settlement possibilities. There were rapid increases in refugee intake during 1979 and 1980 because of the special Indochinese refugee program. The total refugee inflow, which had amounted to about 10 per cent of post-war immigration, accounted for a quarter of the movement in 1979 and is estimated to have been between 25 and 30 per cent in

1980. The total intake projected for 1981 is 21,000 or roughly 15 per cent of the overall immigration level announced by the Minister.

Regarding settlement patterns, family class immigrants and, to a slightly lesser extent, assisted relatives tend to settle in the same areas as their relatives, mainly in Canada's largest urban centres, which are also our deepest labour markets. Independent immigrants tend to be more broadly dispersed, settling both in large urban centres and in other areas of high employment. Refugees also tend to settle in large urban areas but efforts to arrange for their sponsorship and reception across the country have been leading to a more dispersed pattern of settlement.

Figures 10-1 and 10-2 illustrate some of the foregoing concepts and terminology as they apply to the contribution of the immigration movement in 1980 to the labour market. Figure 10-1 shows the contribution of each immigrant class in 1980 to the labour force. Figure 10-2 consists of four subsidiary charts showing the proportion of each class which was destined to the labour force as well as the number and per cent of those with prearranged jobs. In the case of independent immigrants and assisted relatives, the charts also identify the number

and per cent of immigrants specifically selected to meet identified labour market needs in Canada as well as the proportion having prearranged jobs.

From these figures and Table 10-1, one can calculate that out of an overall immigration intake in 1980 of 142,634, the combined independent and assisted relative groups numbered 51,578 or approximately 36 per cent. Of this combined group, 20,016 or about 40 per cent were specifically selected to meet identified labour market needs and of *this* smaller group, 5,770 arrived with prearranged jobs. In other words, out of a total intake of 142,634, barely 4 per cent were selected in response to validated requests from employers.

Requirements for Foreign Labour

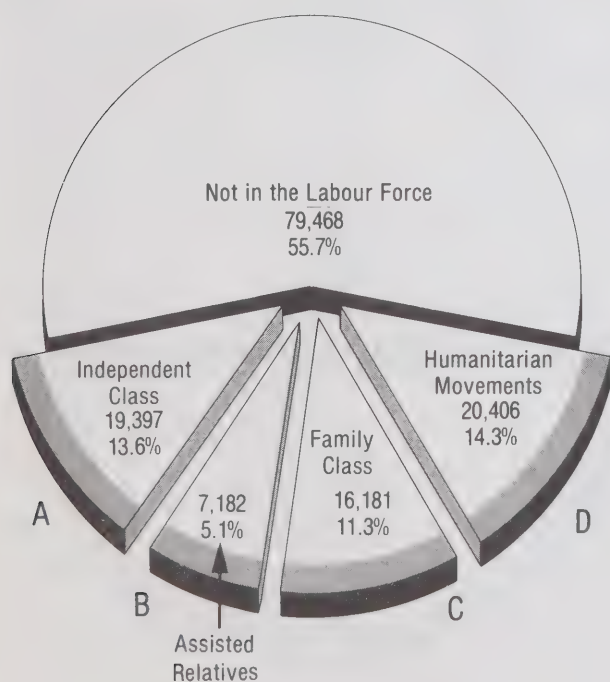
Workers Admitted as Permanent Residents

As Chapter Four indicated, no *generalized* labour shortage is foreseen for the 1980s and hence the Task Force sees no requirement for a large increase in the immigration intake to meet labour market needs. We expect, however, that the annual level of foreign labour requirements may have to be somewhat higher on average in the 1980s than in recent years. Major adjustments will be required in the labour market and they are likely to be substantially different and in some respects more difficult than in the past. Changing demand conditions will continue to give rise to major changes in the geographic focus and industrial mix of economic activity and, as a consequence, in occupational demand. Responses to this demand will be constrained to some extent by a number of basic factors such as relatively low rates of labour force growth and major, rapid changes in labour force composition. Increased levels of emigration of skilled personnel might also complicate the adjustment process, and there is some evidence that this might be occurring (see Table 10-3).

As previously noted, the contribution of immigration to easing problems inherent in the adjustment process will be to relieve bottlenecks in labour supply. Our approach to forecasting demand for foreign labour takes account of both recent patterns of occupational imbalances in specific skills and geographic regions, and recent trends in validated job offers extended by employers to foreign workers. Chapter Four indicated the difficulties inherent in forecasting occupational demand. Here we mention considerations peculiar to forecasting the foreign worker component of that demand.

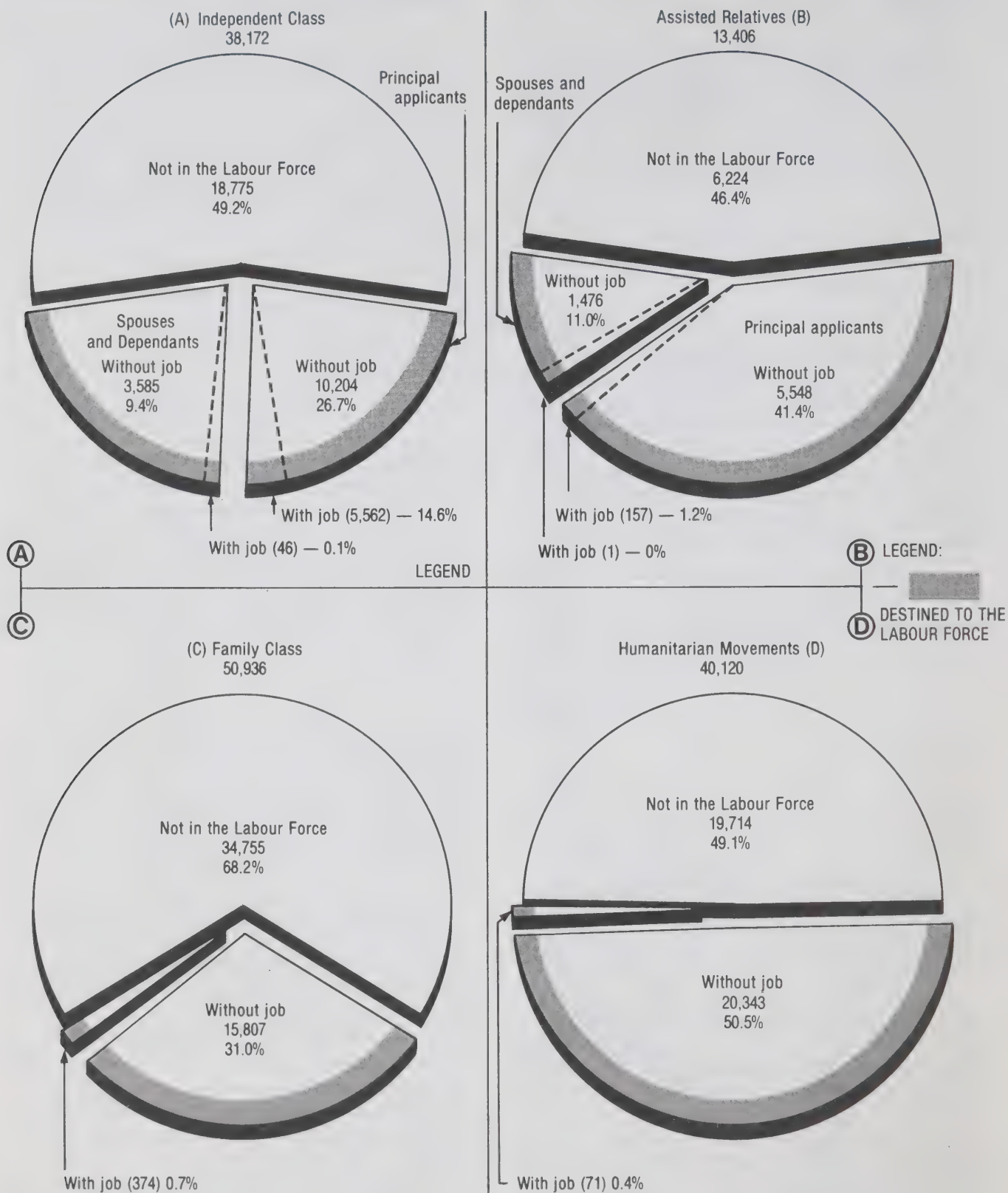
Although some members of all classes of immigrants (including family class and refugees) make arrange-

Figure 10-1
Immigrants Destined to the Labour Force, 1980



Source: Based on CEIC data.

Figure 10-2 Immigrants Selected to Meet Labour Market Needs



Source: Based on CEIC data.

Table 10-3

U.S./Canada Occupational Balance, 1974-1977

2 digit code	Emigrants to United States		Immigrants from United States		Net balance	
	1974	1977	1974	1977	1974	1977
11 Management, administration	620	1,843	1,259	815	+639	-1,028
21 Nat. sci., engin., math	434	977	953	298	+519	-679
23 Soc. sci. and related	99	187	481	171	+382	-16
25 Religion	97	171	334	304	+237	+133
27 Teaching and related	272	474	1,348	688	+1,076	+214
31 Medicine and health	742	1,607	843	454	+101	-1,153
33 Artistic, literary	133	274	509	287	+376	+13
37 Sports and recreation	59	113	62	29	+3	-84
41 Clerical and related	604	1,068	1,372	593	+768	-475
51 Sales	199	445	548	229	+349	-216
61 Service	479	596	562	294	+83	-302
71 Farming, horticulture	56	87	263	105	+207	+18
73 Fishing, hunting	3	7	16	4	+13	-3
75 Forestry and logging	26	8	82	7	+56	-1
77 Mining and quarry	11	17	18	6	+7	-11
81/82 Processing	63	50	181	53	+118	+3
83 Machining and related	284	289	278	70	-6	-219
85 Product fabrication	353	382	567	244	+214	-138
87 Construction trades	264	270	643	262	+379	-8
91 Transport equipment	61	98	174	60	+113	-38
93 Material handling	20	38	43	13	+23	-25
95 Other crafts and equipment	26	45	80	33	+54	-12
99 All other	226	217	207	182	-19	-35
Total	5,131	9,263	10,823	5,201	+5,692	-4,062
1974						
Total emigration to United States	11,385					
Immigration from United States	26,519					
1977						
Total emigration to United States	20,894					
Immigration from United States	12,796					

Source: C. Taylor, I. Timonin and J. J. Kelly, *Immigration, Emigration and the Labour Force*, CEIC, October 1980.

ments abroad to take up specific jobs offered to them in Canada, the number and proportion in the family and refugee categories have been small in comparison with those in the independent class (Table 10-4). For purposes of forecasting the demand for foreign workers, we focused our attention on data relating to independent class immigrants and assisted relatives with prearranged employment. Such data are a concrete expression of past demand which, when modified according to projected changes in occupational demand, may be used to project future demand for foreign workers. However, two further qualifications are needed. First, not all employers' requests for foreign workers are approved by the CEIC since some do not meet the criteria noted in Section II above. Although reliable information is not available on employment requests turned down, there is little evi-

dence of complaints by employers on this score. Second, while all independent immigrants with job offers are by definition "selected workers," there are other "selected workers" in the independent and assisted relative classes who are pertinent to our forecast. These are immigrants who enter occupations deemed to be in demand but who do not have prearranged jobs. (It will be recalled that there is yet another group of labour market destined independent immigrants and assisted relatives — those spouses and dependants of principal applicants who enter the labour force even though their admission was not contingent on assessment against labour market criteria.)

Forecasts of requirements for foreign labour must take account not only of some measure of demand but also of policies on how such demand should be met. As

Table 10-4

Immigrants Destined to Labour Force, 1975-1980

	Independent			Assisted Relative/ Nominated			Family Class			Total ¹		
	With job	No job	Total	With job	No job	Total	With job	No job	Total	With job	No job	Total
1975	10,166 22.4	29,900 74.6	40,066	2,235 9.9	20,319 90.1	22,554	54 0.4	12,422 99.6	12,476	12,455 16.6	62,641 83.4	75,096
1976	9,737 42.5	13,172 57.5	22,909	1,529 8.1	17,298 91.9	18,827	38 0.3	13,624 99.7	13,662	11,304 20.4	44,094 79.6	55,398
1977	7,358 47.6	8,114 52.4	15,472	1,085 7.3	13,831 92.7	14,916	23 0.2	12,582 99.8	12,605	8,466 19.7	34,527 80.3	42,993
1978	4,424 46.0	5,198 54.0	9,622	499 5.2	9,157 94.8	9,656	78 0.7	11,209 99.3	11,287	5,001 16.4	25,564 83.6	30,565
1979	4,681 36.5	8,133 63.5	12,814	242 3.9	5,945 96.1	6,187	663 4.4	14,490 95.6	15,153	5,586 16.4	28,568 83.6	34,154
1980	5,608 28.9	13,789 71.1	19,397	158 2.2	7,024 97.8	7,182	374 2.3	15,807 97.7	16,181	6,140 14.4	36,620 85.6	42,760

¹Does not include refugees (over 99 % of refugees do not have job offers).

Source: CEIC statistics.

noted earlier, our analysis assumes that existing policies to ensure reliance on domestic sources of labour supply will remain unchanged. The Task Force agrees that the admission of foreign workers should not adversely affect employment opportunities for Canadian residents. It might be noted in this regard that, in addition to relieving labour shortages, some foreign workers have contributed extensively to training Canadians workers on the job. We also agree that foreign workers should not be supplied to enterprises whose wages, working conditions or stability are such that they cannot attract Canadian residents. If, in addition, the jobs are in unproductive enterprises, there is all the more reason not to supply them with foreign labour. The Task Force recognizes that undertakings for which the CEIC demands that employers have well-developed human resource plans provide a useful basis for linking labour market policy with immigration policy.

In the light of the foregoing observations, and those in Chapter Four on occupational imbalances, the Task Force concludes that precise forecasts of annual requirements for foreign workers are not feasible. It is nevertheless essential for a variety of planning and management purposes in both the public and private sectors that these requirements be given some dimension. Individual firms and industries need some idea of the degree to which they may be able to recruit foreign workers to complement their work force from domestic sources. Authorities within the CEIC who are responsible for working with firms and industries to identify foreign worker requirements and to negotiate agreements

regarding the terms and conditions under which individual employers meet such requirements, need to have some idea of sizes of the annual "selected worker" intake to ensure that adequate procedures and resources exist to expedite their arrival. Other CEIC authorities, responsible for the management of both the overseas and domestic elements of the immigration system, have similar information needs for similar reasons.

For planning purposes, therefore, the Task Force concludes that during the current decade there should be sufficient room in the overall annual immigration movement, on average, to accommodate in the order of 20,000 to 25,000 "selected workers" to meet genuine and urgent requirements in the labour market which cannot be met from other sources. Actual requirements and admissions would need to be monitored closely to correct this rough estimate as required. Failure to space out some of the major energy projects or changes in international trade patterns could have a significant impact on the figure established for planning purposes.

Given current ratios of dependants to principal applicants, and including entrepreneurs, self-employed and retired people, Canada would have to take in an annual average of roughly 50,000 to 60,000 immigrants in the independent class and assisted relative group to produce the 20,000 to 25,000 "selected workers."

Temporary Workers

Requirements stemming from the various megaprojects planned, notably in the West, may result in a significant

increase in the annual flow of temporary workers to Canada. It is not clear whether a large increase in temporary workers would itself create special problems at work sites or in communities, and the Task Force did not explore this question.

Canada's current employment visa policies for temporary workers appear adequate to facilitate acquisition of skilled workers needed for one year or less, even if increased numbers are needed. However, workers needed for longer periods are unlikely to be attracted in sufficient numbers by merely extending the period of temporary work permits. These skilled workers, who are in high demand internationally, are likely to need the inducement of being granted permanent residence, since this status confers most of the rights and privileges of Canadian citizens. Those who choose to remain in Canada permanently possess the skills to establish themselves self-sufficiently with little difficulty.

It should be mentioned that the Task Force has not considered employment visa policies as they might apply to unskilled or semi-skilled labour. We are aware that there have been occasional problems — in some instances, significant problems — with the temporary employment of seasonal agricultural workers and domestics. Our analysis of labour market conditions in the 1980s and our assumption that the government would not, in general, agree to the admission of large numbers of unskilled or semi-skilled temporary workers led us to conclude that we need not explore this issue in detail.

Obtaining the Skills Canada Needs

Whether Canada can obtain the skills it will need during the 1980s depends on two basic factors: 1) the availability of needed skills in the international labour market; and 2) the management of the process by which identified requirements for these skills are met.

International Competition

Obtaining the skills Canada needs will be complicated by a relative reduction in the attractiveness of Canadian wages and working conditions by international standards and by growing international competition for the skills needed in Canada.

Canadian wages and working conditions are relatively less attractive now than in the past, in comparison with those prevailing in western European countries which have traditionally supplied this country with higher level skills. Comparisons of purchasing power, however, indi-

cate that Canada still retains an advantage — albeit a marginal one — over most of those traditional source countries (see Table 10-5). In both purchasing power and working conditions Canada is likely to continue to have substantial advantages over non-traditional (e.g., Asian) source countries, but even there growing international competition is tending to drive up wages.

Table 10-5

Selected International Comparisons of Purchasing Power
(hours of work required to purchase basic goods and services)¹

City	Household "basket of staples" ²		Overall expenses ³	
		Rank Order		Rank Order
Amsterdam	17.75	5	82.50	3
Brussels	29.75	15	102.00	11
Chicago	16.25	4	75.25	1
Copenhagen	19.00	8	90.50	9
Düsseldorf	18.25	7	98.25	10
Geneva	20.75	11	126.75	14
Helsinki	33.25	16	362.25	24
Hongkong	61.25	21	241.00	22
Istanbul	59.25	20	142.00	16
London	33.25	16	80.75	2
Los Angeles	15.25	2	89.75	8
Luxembourg	19.25	9	155.75	17
Madrid	33.75	17	548.00	25
Manilla	132.00	12	189.25	18
Mexico	34.25	18	139.50	15
Milan	33.75	17	86.00	6
Montreal	17.75	5	85.50	5
New York	18.00	6	116.50	13
Oslo	24.50	13	278.50	23
Paris	26.75	14	224.75	21
San Francisco	15.00	1	194.25	19
Stockholm	23.50	12	87.75	7
Sydney	15.50	3	204.25	20
Tokyo	39.00	19	87.75	7
Toronto	19.75	10	104.25	12
Vienna	23.50	12	84.25	4

¹Based on gross income of 12 representative occupational groups.

²Weighted selection of food and sundries.

³Weighted selection of food and sundries as well as household appliances, clothes, transportation and miscellaneous services.

Source: Publication No. 69 in the series of studies on economic, banking and monetary questions published by the Union de Banques Suisses; May, 1980.

The significance of such comparisons is not clear. On the one hand, it is evident that certain key Canadian "pull factors" are not as strong as they used to be, even though it is probably reasonable to assume that Canada continues to rate high on a notional "quality-of-life" scale. On the other hand, the decision to emigrate is a major one for most people, generally taken after extended consideration of many factors. This suggests that various strategies to attract immigrants may have some

effect. Examples of such strategies include active recruitment and effective communication of Canada's interest and requirements for skilled foreign labour.

On the latter point, it should be observed that historically, domestic occupational demand has not always been matched with precision by foreign labour supply. During periods of rapid employment growth, evenly spread across occupations, precision in matching is not as crucial, particularly at the lower end of the skill scale, as when labour shortages are largely limited to certain regions and skilled occupations. Control of *overall* immigration levels at such times tends to be as important in adjusting flows to the labour market as the application of domestic demand criteria to facilitate the selection of specific skills. This was reflected in the "tap-on, tap-off" approach to controlling immigration during most of the post-war period, which tended to give confusing signals about Canada's specific labour market needs.

Even with the "tap" off there was always some demand for particular skills, but the general signal perceived abroad may have been that immigrant workers were not needed in Canada regardless of their skills. This may not have created serious problems during periods of abundant foreign labour supply. Such an approach is bound to create problems, however, during the current and forecast period when the availability of foreign skills by historical standards is bound to be reduced. Skilled persons abroad should know that there may be a need for them at any time in the Canadian labour market. A smoother, planned approach to the immigration intake for labour market purposes, based on consultations with the private sector, would facilitate the development of the more effective communications referred to above. It would also facilitate human resource planning by Canadian firms.

The effect of international competition for the skills Canada needs is difficult to evaluate with precision. Although Canada's requirements are not likely to be large relative to the demand of some other countries and regions, some skill requirements may be critically important internationally and they may simply not be available in sufficient numbers to satisfy even a fraction of world requirements. In this regard, it must be remembered that competition for labour is increasing in areas such as Asia, which have not traditionally supplied a significant proportion of Canada's higher skill intake.

Emigration to the United States is an aspect of this international competition which deserves special attention. Data on emigration are poor but some excellent preliminary work prepared for the Task Force gives us some indication of potential difficulty stemming from

emigration to the United States. Table 10-3 indicates that in certain critical areas Canada has been experiencing a net loss of skills in recent years, a reversal of earlier flows. It remains difficult to assess whether this reversal is truly significant for any given trade and whether the emigrants include U.S. or other foreign nationals. The admissibility of Canadian residents to the United States as permanent residents is governed by quotas. For persons born in Canada the applicable quota is that for the Western Hemisphere, for which there is always a waiting list. For persons born outside Canada, even if they are Canadian citizens, the applicable quota is that for their country of birth. The admissibility of such persons may be more or less difficult than for those born in Canada. Barring a change in U.S. immigration policy, therefore, we would not expect a sudden major increase in emigration to the United States although relatively small numbers of critically important skilled persons could nonetheless continue to emigrate there.

It may be worth noting that in certain industries, such as the petroleum industry, relations between professionals in Canada and the United States are often close and marked by a good deal of trans-border travel. Familiarity with working conditions and lifestyles on both sides of the border would tend to facilitate quick personal decisions to move one way or the other depending on the relative attractiveness of job opportunities.

Management Issues

The policy framework and management system for immigration is not designed exclusively or even primarily to achieve labour market objectives. As the preamble to the *Immigration Act* illustrates, immigration policy serves a broad range of important national objectives which may well be in competition with one another at any given time. Thus, there are distinct limits to the degree to which adjustments may be made to the system to increase its responsiveness to any given major objective. Furthermore, immigration has always played an important role in Canada's bilateral relations and will no doubt continue to do so. This could influence decision-making on immigration matters in ways which are not necessarily consonant with labour market objectives.

The Task Force was impressed with the complexity of policy and management issues in immigration but nonetheless ventures comments on two related management issues. First, it seems reasonably clear that a substantial degree of direct recruitment by Canadian firms of immigrants for the labour market is likely to continue to be necessary to ensure precision and timeliness in matching foreign labour supply with specific

domestic requirements. To facilitate such recruitment and to ensure rapid processing of the applications of immigrants with job offers, the CEIC and the Department of External Affairs may need to consider a variety of measures to strengthen the overseas capacity of Canada's offices as well as to continue improving clearance procedures in Canada. Special ongoing consultative arrangements between employers and the CEIC might focus on identifying demand for foreign workers as well as the best means of admitting them promptly.

Second, it will be important to ensure that there is adequate room in the annual immigration intake to accommodate all of the foreign labour for which needs have been identified.

The size of the overall annual immigration movement is meant to match a target level announced annually in the fall by the Minister of Employment and Immigration in accordance with provisions of the *Immigration Act*. The level is determined after consultations with the provinces and some voluntary organizations. Even though the level of immigration for labour market purposes should reflect industrial needs as well as policy considerations, consultation with employers and unions on labour market needs has tended to be limited and cursory. More extensive consultation with these groups is planned by the CEIC.

In recent years the level has been expressed as a specific figure for the forthcoming calendar year. The experience of the first two levels exercises in 1978 and 1979 demonstrates that there is bound to be some discrepancy between announced levels and actual immigration (1979 level: 100,000 — actual immigration: 112,000; 1980 level, 120,000 — actual immigration: 143,000). Discrepancies arise from a wide variety of factors ranging from administrative considerations to unforeseeable political upheavals. On the latter point, for example, the 1980 level was adjusted upwards by 10,000 when the Southeast Asian refugee situation resulted in a substantial increase in the projected refugee intake. The government decided nonetheless to increase the refugee intake even more as the full extent of the plight of the "boat people" became apparent.

Table 10-1 indicates that in recent years the proportion of immigration in the family class has grown substantially while the proportion in the independent class has been reduced. This has given rise to concerns in some quarters that the combination of an annual target level for immigration, limited influence on the size of the family class, its priority in the processing of applications, and unforeseeable requirements to increase planned refugee intakes could lead to unplanned reductions in the size of the independent class and hence in

the numbers of immigrants who could be selected to meet labour market needs.

If it became clear that the relatively modest numbers of "selected workers" that we have estimated would need to be reduced to make room for increased family class intakes, the Task Force would see merit in a review of the components of the immigration movement and the priorities governing the processing of applications to see how they might be adjusted to reflect accurately the full range of immigration policy objectives.

For the present, careful account should be taken of labour market needs so that they can be built explicitly into the levels-setting exercise. Planned level-setting consultations with employers and unions should help in this regard. In addition, more accurate identification of needs could increase the proportion of independent immigrants and assisted relatives with job offers and correspondingly reduce the proportion admitted on the basis of inherently inaccurate demand criteria derived from existing forecasting instruments. This would increase the precision of the match between domestic requirements and foreign labour supply, reducing the need to increase the overall size of the immigration intake or of the independent class in order to ensure adequate numbers of the skilled immigrants Canada needs. Our estimate that the independent class and assisted relatives groups would have to number 50,000 to include 20,000 "selected workers" may therefore be on the high side. It must be remembered, however, that this would not alter problems relating to the relative size of the various immigrant classes or to processing priorities.

Implications for Policy

The basic conclusion of the Task Force is that the principal objective of immigration policy for labour market purposes in the 1980s should be to facilitate the supply of workers to productive enterprises by admitting from abroad those skilled workers who cannot be obtained from domestic sources in the short term. Although it may be said that such an objective has traditionally been part of Canadian immigration policy, labour market conditions in the current decade give it special meaning.

In the light of the foregoing, consideration should be given to the following measures.

- The proportion of immigrants with prearranged employment should be increased to achieve a better match between domestic needs and foreign skilled workers and to minimize the need to raise immigration levels to accommodate these workers.

- The location, procedures and resources of both overseas immigration offices and domestic CEIC offices should be adjusted, as required, to ensure prompt, effective recruitment and selection of the skilled workers Canada needs.

Such measures should contribute to the achievement of the principal objective proposed above by increasing the likelihood that employers' approved requirements for foreign labour can be met fully and promptly.

The analysis of Canada's foreign skill requirements in the 1980s is based largely on the analysis of occupational imbalances in Chapter

Four and on several internal CEIC studies concerning labour market destined immigration. Historical background was derived from a variety of well-known published sources such as the White Paper of 1966, the Green Paper of 1974 and its supporting studies, as well as the ever-useful reference work by Dr. Freda Hawkins, Canada and Immigration: Public Policy and Public Concern (1972). Descriptive material on the operation of the immigration system was obtained from a variety of published sources such as the recent annual reports on immigration levels and interviews with CEIC staff. Concern over the dearth of emigration data led the Task Force to commission a highly useful but preliminary study on labour market immigration/emigration flows between Canada and the United States conducted by Mr. Chris Taylor of the Environmental Studies Program, Innis College, University of Toronto. Dr. J.J. Kelly of Statistics Canada and Mr. Ivan Timonin of the CEIC. At the request of the Task Force, Mr. Taylor is pursuing further work in this area.

Chapter Eleven

Facilitating Labour Adjustment

Canadian labour markets have been adjusting and will continue to adjust to changing economic circumstances. Workers regularly move to new localities, change employers, train for and enter new occupations. New jobs are created and old ones are eliminated. New firms are created, successful ones expand, and unsuccessful ones decline and die. Although some of these changes are captured in the data showing a net annual growth in employment averaging 300,000 to 400,000 per year over the 1970s, the gross change is substantially greater. Over one million new jobs are created each year, and about three-quarters of a million jobs disappear.

Most of these changes are responses to changing technology and changing demand for goods and services. The speed and efficiency with which these changes are accomplished determine the degree to which Canadians achieve the benefits of higher productivity and output and the distribution of these benefits.

Changes will continue to occur in the 1980s. Indeed, as we have noted in Chapter Four, we expect the pace of change to be somewhat more rapid in the 1980s than in the 1970s. On balance we are optimistic that growth in the demand for labour will be strong during the 1980s — outstripping growth in labour supply. Thus, unemployment rates should slowly fall in the course of the decade.

Even though the outlook for the world economy is somewhat uncertain, in many industries Canada is now much more competitive than it was a decade ago. Although productivity growth in Canada during the 1970s was much slower than during the 1950s and 1960s, it was more rapid than in the United States, our major trading partner, and somewhat slower than in the United Kingdom, Germany, France and Japan. However, the decline in external value of the Canadian dollar and relatively moderate wage inflation since 1975 has meant that Canadian wages in manufacturing (\$8.81 U.S. per hour in 1980) are now well below those in the United States (\$9.89 U.S.) and most European countries. While Canadian wages are still higher than those

in Japan, differences have narrowed markedly. In sum, Canadian labour costs today compare more favourably with those of our major trading partners than they did a decade ago. Despite increased competition from the newly industrialized countries of Asia, this favourable labour cost situation should provide considerable incentive for growth of output and employment in the goods industries, including manufacturing, in the 1980s.

While the outlook for the goods-producing sectors appears strong for the 1980s, as indicated in Chapter Four, appreciable differences will exist between industry categories. Major difficulties are being experienced by our textile, clothing, footwear and automotive industries in competing with imports from newly industrialized countries and Japan. Problems in these sectors are expected to continue into the 1980s. In contrast, significant growth is anticipated in the whole of the primary sector, the energy sector and in several manufacturing sectors. Thus, continuing change can be anticipated in both the mix and location of economic activity. We expect the impact of changes to be particularly important in central Canada.

Adjustment to change creates problems in accommodating shifts not only in the location but also in the mix of skills required. A recent analysis of impacts of U.S. trade shifts (Aho and Orr, 1981) concluded that the adjustment burden falls more often on women, minorities, the less-educated, and the lower-paid groups least able to afford it. This is equally true in Canada.

Difficulties in accommodating change often result from the asymmetric distribution of the costs and benefits of adjustment. Although in total there are large net gains from adjustment to change, these benefits are widely dispersed and thus small for any single person, whereas the costs are highly concentrated and thus fairly large for each of the limited number of workers affected. The need for greater assistance to accommodate change has been recognized, but frequently the necessary budgetary funds have not been committed. In this context the recent allocation of incremental funds for adjustment assistance by the federal government is

most encouraging. Moreover, the costs of accommodating change before the event are always perceived as being extremely high. After the change has occurred, a review of the experience would reveal that the actual costs were much less. Any program to facilitate change must deal with this fact.

Accommodation of change is also considerably more difficult in thin non-metropolitan labour markets than in major metropolitan centres. In the big cities, many new jobs open up every day, even for workers with specialized skills, and many new workers enter the labour market. Workers involved in a major layoff or shutdown can usually find suitable work fairly quickly. In smaller non-metropolitan areas, however, there are very few job openings at any given time and workers may have to wait a long time before finding re-employment in their community or may have to move to another area. Similarly, employers starting up or expanding in a smaller community may have to draw workers from outside because no qualified workers are available locally. Thus the problems of adjustment are considerably more difficult in smaller communities than in larger ones, and active government policy may often be required to smooth the adjustment process.

As Canada will have to meet the demands for labour internally without significant reliance on immigration, there is pressing need for effective adjustment policies to accommodate both up-side and down-side demand shifts. In this regard, the emphasis assigned to this problem by federal government departments is most encouraging. The initial allocation of \$350 million represents a very important commitment to this pressing need. This chapter will provide a brief overview of the adjustments and policies required.

Adjustment Requirements in the 1980s

In the 1980s the Canadian labour force will have to respond to changes in the structure of demand for labour which will probably be even greater than those experienced in the past. The more common categories of anticipated change can be briefly described.

- *The commencement and phase-out of resource-based activities.* Strong demand for mineral, forest and petroleum products will continue to result in possibilities for significant net incremental employment in these sectors. Very frequently, these activities will result in new demands for labour in remote regions. While these new resource activities are coming on stream, older operations will be phased out as the resources are depleted or decline in quality. Hence, there will be on-going need to redeploy workers.

- *Shifts in consumer demand.* For example, the switch in demand from larger automobiles to smaller fuel-efficient cars will continue to have a major impact on the requirements for Canadian labour.
- *Changes in international competitiveness.* Imports from Third World countries will continue to have major impact on Canadian industries such as clothing, footwear, household electrical products and office equipment.
- *Interregional differences in rates of economic growth.* In Chapter Four we indicated that appreciable differences in provincial growth rates are anticipated during the 1980s. The three western provinces and Newfoundland are expected to grow at a rate significantly above average while lower rates are expected for central Canada and the Maritime provinces.
- *Technological change.* Changes in both the numbers and skill levels of employees are anticipated in many industries. Robotization is expected to have a strong impact on the structure of skills required in manufacturing. Increased use of microprocessors in the office will have a more dramatic impact on the structure of white-collar employment.
- *Strong markets for fish.* The 200-mile limit, coupled with strong world demand for fish, will continue to provide opportunities for employment in the fishing industry, if the productivity of the Canadian industry can be increased.
- *Rising relative price for energy.* Increased prices for energy will lead to changes in production processes in energy-intensive industries and in the demand placed upon the housing and transportation industries. New employment opportunities will be generated by these changes.

Major shifts in the demand for labour are not new to Canada. In the 1950s, for example, there was a very rapid increase in the output of the Canadian aerospace industry. Changes in this and other sectors, however, were accommodated by relying on immigration to alleviate the supply problems. As discussed in Chapter Ten, we cannot rely on immigration to solve our problems of shortages in the 1980s and thus must ensure the redeployment of the domestic labour force. Adjustment, therefore, will be a much more important consideration in the 1980s than it was in the 1950s and 1960s.

The Built-in Adjustment Capability

Although the need for labour force adjustment is expected to be great, a review of Canadian experience to date indicates that Canadian workers have substantial ability

to adjust. Contrary to popular mythology, Canadian workers, especially younger workers, are very mobile geographically. In Chapter Two we have described the very high rates of internal migration. Approximately 2 per cent of the adult population move between provinces and up to 5 per cent move between centres within provinces each year. By world standards this represents a very high degree of mobility.

Canadians also accommodate changes in employment opportunity by changing occupations and industries. A study of major layoffs and shutdowns by the Department of Industry, Trade and Commerce (1979) documented these worker responses to major shutdowns or layoffs. As Table 11-1 indicates, over two-thirds of workers involved in six closure or layoff situations changed either occupation or industry or both. Most of these workers secured a higher wage in their new employment, as shown in Table 11-2.

Table 11-1
Experience of Displaced Workers in New Job

Displacement	Per cent of workers changing	
	Occupation	Industry
Clothing-Layoff	62	73
Primary textile-Layoff	90	90
Electronics-Layoff	79	81
Textiles-Closure	93	91
Textiles-Layoff	94	95
Electronics-Closure	79	78

Source: G. Glenday, *Key Factors in the Income Loss of Laid-off Workers*, a report prepared for the Department of Industry, Trade and Commerce, 1979.

Table 11-2
Experience of Workers in New Job

Displacement	Per cent of workers receiving	
	Increased wages	Decreased wages
Clothing-Layoff	55	28
Primary textile-Layoff	53	34
Electronics-Layoff	46	42
Textiles-Closure	65	28
Textiles-Layoff	66	23
Electronics-Closure	55	26

Source: G. Glenday, *Key Factors in the Income Loss of Laid-off Workers*, a report prepared for the Department of Industry, Trade and Commerce, 1979.

Table 11-3 gives more detailed information for two samples of employees laid off in Sherbrooke, Quebec. In

the first case the employees had been permanently employed prior to layoff. The second case included both permanently employed and intermittently employed workers.

In general, total income loss due to layoff was very small for both permanently and intermittently employed workers. Most workers found jobs at higher wage rates and these extra wages quickly offset the losses during the period of unemployment. Only in the case of women who were permanently employed prior to layoff did the replacement jobs pay less.

Similar results were found in analyses of major layoffs from textile plants in Shawinigan, Quebec and Prescott, Ontario. In these cases, described in Table 11-4, within three years the male workers had made up through higher wage rates for all losses due to layoff. Female workers, however, had greater difficulty gaining replacement employment and the wages paid in new employment tended to be about the same or slightly less than those paid prior to layoff.

Although it is not possible to assess the total social cost of layoffs and closures or to generalize from these examples, some insights can be useful for subsequent, more extensive research.

- The overall income losses viewed retrospectively were not as great as might have been anticipated. Even for permanent workers earning approximately \$10,000 per year, maximum losses were in the order of a half-year of pay.
- There was a very substantial difference between the losses of those previously holding permanent jobs and those having temporary or intermittent employment. In the latter case the overall losses were minimal, primarily because most workers obtained new jobs at higher rates of pay.
- The losses for women who had previously held permanent jobs were much greater than those for men.

In spite of this demonstrated capacity of Canadian workers to adjust to economic change at relatively little cost in terms of lost income, adjustment is often slower and more difficult than it need be. One of the reasons for slow adjustment is that firms, workers and governments often resist change. Although the benefits from adjustment and adaptation are large, they are widely diffused and most individuals gain only a small amount from any single adjustment. The private cost of adjustment in the case of major layoffs or closures is borne by a small number of firms and workers. Examples of these private costs can be briefly summarized.

- *Decreased housing values.* Major layoffs can bring about a decline in housing values, particularly in thin labour markets. The benefits from this decline may be transferred to subsequent occupants (and indirectly to new industry in the form of lower wage requirements). The difficulties faced by those enduring losses must be considered. It is not reasonable for those affected to have to accept the losses when the benefits from adjustment are spread over the rest of society.
- *Loss of pension benefits.* The general lack of pension portability and restrictive vesting provisions results in major losses to workers enduring permanent layoffs.
- *Restrictions in the transferability of trade certification.* These restrictions can translate into monetary losses.
- *Loss of social contacts.* The psychic costs of relocation stemming from a shutdown or layoff may mean these workers require a wage increase to consider themselves equally well-off.

Table 11-3

Income Losses: Permanent Layoffs in Sherbrooke, Quebec

		Relative change (per cent)		Maximum income loss (constant 1978\$)
	Type of worker	Time employed	Wages	
A. <i>Sample no. 1</i>				
Workers previously permanently employed	Male, 40, married	-22.2	+7.1	460
	Male, 25, single	-26.1	+4.1	1139
	Female, 25, single	-45.8	-9.4	4779
	Female, 40, married	-45.4	-6.8	4790
B. <i>Sample no. 2</i>				
Workers previously permanently and intermittently employed	Male, 40, married	-10.1	+ 9.5	396
	Male, 25, married	- 8.0	+24.5	26
	Female, 25, single	-28.1	+21.9	16
	Female, 40, married	-39.1	+ 7.5	940

Source: G. Glenday, G. P. Jenkins and J. C. Evans, "Worker Adjustment Policies: An Alternative to Protectionism," North-South Institute-World Bank Monograph entitled, *Canada in a Developing World Economy: Trade or Protection* (forthcoming), pp. 36-37.

Table 11-4

Private Income Losses: Workers Laid Off in Shawinigan and Prescott

Region	Type of worker	Relative income loss (per cent) within			Maximum income loss (constant 1978\$)	Time to reach maximum loss (months)
		1 yr.	3 yr.	5 yr.		
Shawinigan	(a) Single male, 25	1.7	-2.1	-2.9	126	8
	(b) Married male, 40	2.9	-1.0	-1.7	261	11
	(c) Single female, 25	23.9	22.1	21.5	6,784	60
	(d) Married female, 40	16.6	14.0	12.8	4,625	60
Prescott	(a) Single male, 25	-12.0	-15.4	-16.0	10	1
	(b) Married male, 40	-11.8	-15.0	-15.6	25	1
	(c) Single female, 25	17.5	14.8	14.1	4,553	60
	(d) Married female, 40	8.0	6.0	5.4	1,972	60

Note: The relative income loss is defined as the cumulative present value of the absolute loss in full income divided by the cumulative present value of the full income that would have been earned if the employment conditions before job loss were maintained. Income losses are defined as positive, gains as negatives.

Source: G. Glenday and G.P. Jenkins, "Industrial Dislocation and Private Cost of Adjustment," December 1980. (unpublished).

Although adjustment costs can occur with both down-side and up-side adjustments, these examples have focused on the former. The costs for down-side adjustment appear to be concentrated to a much greater degree in a small number of workers. The up-side adjustment costs and benefits are spread much more thinly over a larger group of workers and firms. Expanding firms tend to be small, young, aggressive and without established connections. They draw workers from all across the economy. Thus they have great difficulty in bringing pressure on governments to adopt pro-adjustment policies that would benefit them.

In summary, while the Canadian economy has a significant capacity to adjust to changes in the demand for labour, the costs of adjustment are borne to an undesirable extent by a limited number of workers affected. Hence, the Task Force concludes that selective government intervention is called for to reduce the private costs to workers and to facilitate a smoother movement of workers from declining to expanding sectors of the economy. Greater intervention will be required in thin labour markets in non-metropolitan areas than in the deep markets of major urban centres.

Much research is required to design appropriate adjustment assistance approaches. This research, in our view, could best begin with an analysis of historic layoffs and document adjustment capability under a number of different situations. For this reason, the Task Force commissioned a small group of case studies of specific industries which will be published in a supplementary background paper to the Task Force Report.

Down-side Adjustments

Canadian down-side adjustments resulting from the previously described forces have been both large and frequent. The Task Force found that in the five-year period 1974-1978 inclusive, 70 major layoffs or shutdowns (each involving at least 400 employees) occurred. As expected, these layoffs or closures were concentrated in central Canada, as shown in Table 11-5.

Although the problems associated with layoffs are always significant, they are much more difficult in thin labour markets. The fraction of layoffs occurring in these markets varied greatly between provinces. In Ontario, approximately 50 per cent of the layoffs occurred outside the highly industrial corridor from Oshawa to Niagara Falls. In Quebec, 75 per cent of the layoffs were outside metropolitan Montreal and Quebec City. The layoffs in Manitoba and Alberta were primarily in major metropolitan areas, whereas all those in the Atlantic provinces and British Columbia occurred in smaller centres.

Table 11.5

Geographic Distribution of Major Layoffs, 1974-78

Province	Number of major shutdowns or layoffs
Newfoundland	2
Nova Scotia	6
New Brunswick	1
Quebec	20
Ontario	33
Manitoba	1
Alberta	2
British Columbia	5
Total	70

Note: A major layoff or shutdown is defined as involving 400 or more employees per occurrence.

Source: Task Force data.

As indicated in Chapters Three and Seven, the layoffs were concentrated in cyclical and seasonal industries. In Ontario, 35 per cent occurred in the automotive sector, 15 per cent in mining and 10 per cent in farm machinery. In Quebec the layoffs were concentrated in resource-based activities: approximately 35 per cent were in forest products and mining. The layoffs in British Columbia and the Atlantic provinces were even more concentrated, with over 60 per cent in resource industries (forest products, mining and fishing). Layoffs in the primary sector may have a greater social impact than that suggested by the numbers of workers involved, simply because they take place in small communities. As stated earlier, the significance of hardship associated with a particular size of layoff is much greater in a small community than in a large one. For example, a layoff of 60 employees in Springhill, Nova Scotia could be expected to create considerably greater private and social costs than a layoff of 400 employees in Toronto.

In an extreme case, the reduction of economic activity in a thin labour market can result in the destruction of the employment base of a community. Where a particular industry represents a very high percentage of a region's employment, closure of a firm can mean the destruction of the community because the loss of direct jobs translates into a very extensive loss of indirect jobs. The problem is further compounded because as employment and local enterprises decline the fixed costs of operating the community fall on a greatly reduced population.

Another particular concern with respect to down-side adjustment relates to concentration of the costs. As mentioned previously, major reductions in employment tend to be concentrated disproportionately in special needs groups — older workers, lower skilled workers, women, and so on.

International Examples

Although the foregoing discussion highlights Canadian problems, very similar difficulties are being faced by most developed countries. Several examples from Western Europe indicate that other countries may have even greater problems (*The Economist* 15-21 Nov.; 29 Nov.-5 Dec.; 6-12 Dec.; 20-26, Dec. 1980; 3-9 Jan. 1981).

- British Leyland was expected to lose £300 million in 1980 and to require an injection of £1 billion to enable it to make the capital expenditures needed to produce new models of cars and trucks. The British government estimated that approximately 250,000 jobs were dependent on continuation of the firm. The estimate of the company was 600,000.
- Shipbuilding has suffered major losses in jobs. In 1978 (compared to 1963) employment was down 63 per cent in Denmark, 62 per cent in Sweden and 59 per cent in France.
- Many European coal mines have become noncompetitive by world standards. The Centre-Midi field near St. Etienne, France employed about 25,000 workers in 1960. Today it employs 600.
- The clothing and textiles sectors are also experiencing difficulty. Employment in the French textile industry, for example, has decreased 10 per cent in the last five years.
- The problems of British Steel are well-known. It is going through the painful process of gradually reducing its work force. Productivity remains very low and the firm needs an infusion of about £800 million in 1980-81.

These European examples provide some lessons for Canada on how *not* to adapt to change. Many of the difficulties arose because governments required firms to retain employees rather than make the needed adjustments. This seems to support the view that the long-term costs of non-adjustment are far greater than the immediate costs of adapting to new conditions.

Alternative Government Role

An increased capability to adjust to down-side adjustments for labour would yield benefits that would be widely dispersed among Canadians. The costs, as indicated earlier, are particularly concentrated in subgroups. Recognition of a collective responsibility to compensate the losers would therefore make good sense, to assure that adjustment will not be resisted and that Canadians in general will be better-off.

Having argued the appropriateness of assistance, we now consider three approaches: extending the life of the firm, compensating the workers, and facilitating the re-employment of workers.

The first approach is to extend the life of the firm through temporary subsidies. There can be several advantages in delaying a shutdown by assisting the firm to continue operations.

- The adjustment costs are delayed until a future time and, given the fact that resources have a time value, the economic costs are reduced.
- The layoffs can be planned in an orderly manner. The Task Force believes that the Manpower Consultative Service could play a particularly effective role in facilitating change.
- It may be possible for the firm to alter its facilities, to get into new product lines.

Normally, when a shutdown is delayed the losses increase each year as the firm becomes less and less competitive. Theoretically, the delay should continue until the cost increases exceed the benefits. This approach is not practical, however. Once a decision is made to phase out an operation, the changes should be made quickly — probably not extending beyond one or two years.

In summary, labour adjustment can be facilitated by extending the life of the firm. However, practical factors limit the usefulness of this approach to the short run only.

A second approach is to compensate the workers at the time of shutdown. As a result of a layoff, workers suffer the loss of their net-of-tax wages and frequently their pension benefits. If a change of location is also necessary, they may suffer an incremental loss if the value of their housing is diminished at the time of sale. These losses are offset in part by unemployment insurance payments.

The extent of the necessary compensation to make workers equally well-off after layoffs will vary greatly, depending on the employee's age, skill, sex, location and so on. While the perceived losses may be very high at the time of the layoff, an analysis of past experience suggests that actual losses are much less than those anticipated. It has already been illustrated that, in many cases, adjustment appears to take place relatively quickly with little or no income loss.

It must be emphasized, however, that the losses shown in Tables 11-2 and 11-3 and 11-4 represent lower bounds on the compensation required by the workers to consider themselves equally well-off. Because uncertainty at the point of layoff is great, the losses perceived at that point are generally higher than they eventually turn

out to be. Any compensation program must recognize these perceived costs if the adjustment packages are to be acceptable to the workers. The design of the programs might include some form of payback after new employment is found, by workers whose actual costs turn out to be substantially lower than the perceived costs.

Considerable further research is required to document variations in costs due to layoffs by region, industry, sex, occupation and so forth. Then it would be necessary to consider other important costs not reflected in the wages — pension rights, housing, and so on. In addition, costs would have to be imputed for the perceived uncertainties that accompany the loss of jobs.

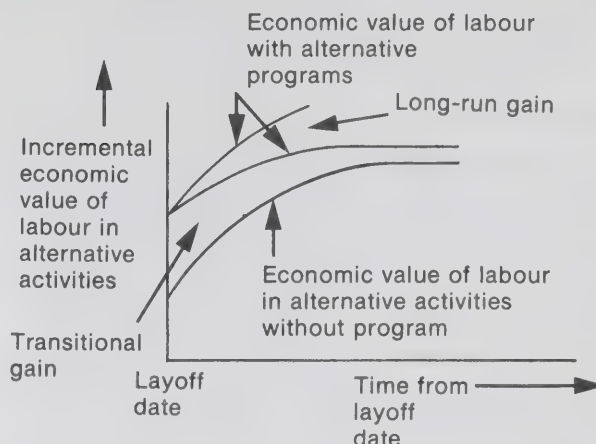
After documenting the most likely actual and perceived costs, various approaches to compensate the workers would have to be evaluated. The Task Force favours compensating workers for losses. For older workers, this may involve the provision of early retirement benefits, as is currently done under the program administered by Labour Canada. For other workers it may involve mobility assistance as well as some compensation for losses on housing. To provide incentives for workers to return to work as quickly as possible, adjustment compensation in the form of a lump sum upon cessation of work is preferable to payments contingent on the duration of subsequent unemployment.

Our study has not included the details of the form adjustment compensation should take. Nevertheless, in concluding this section we would like to emphasize the fundamental principle that adjustment compensation should be paid in the case of major shutdowns or layoffs. All Canadians share in the benefits of adjustment and should collectively bear part of the costs. Stated simply, adjustment assistance should be provided in the form of subsidies from the government to the affected workers.

In addition to compensating workers for the costs of adjustment, it is critical to provide assistance to help workers adapt to new conditions. Some of these measures, which focus on helping workers to find new jobs and reducing the time spent in unemployment, were discussed in previous chapters. They cover a broad spectrum: job search, counselling, retraining and income maintenance programs.

The effectiveness of the re-employment programs should be judged according to both their short-run and long-run effects, as indicated in Figure 11-1. Although we are concerned about the time spent in the immediate future on non-productive activities, we are also concerned about the long-run gains resulting from higher income levels, continuity of employment, and increased productivity.

Figure 11-1



The valuation of the re-employment curves indicated in Figure 11-1 involves a comparison of the differentials between the appropriate upper curves and the value of labour in alternative activities without a program. Depending on the type of re-employment program, the emphasis of the benefits may be on either transitional or long-term gains, or a combination of the two.

Job counselling and search assistance provide primarily transitional gains, by increasing the speed of re-employment and improving the match of workers and jobs. Mobility grants are frequently used to increase the speed of re-employment. These grants should not only cover the moving costs but include some additional compensation, where warranted, to offset some of the unmeasured costs of a forced move.

Portable wage subsidies and training are examples of re-employment assistance that can provide both short-run and long-run gains. An evaluation of training has already been discussed extensively in Chapter Nine. Portable wage subsidies can produce extensive long-run benefits. However, two concerns are important.

- Subsidized workers may be simply substituted for workers already available. Hence, this approach should not be used in circumstances where the substitutability of labour is high.
- Subsidized workers may end up in other declining industries.

The evidence on income loss due to plant closure suggests that greater assistance may be required for women than for men and for older than for younger workers. Much more research and thought are required,

however, before we can be sure that a portable wage subsidy program will continue to serve the adjustment objectives. This further analysis should be undertaken as soon as possible by CEIC.

Up-side Adjustments

It is understandable that much discussion and analysis of labour adjustment focuses on the costs to workers and communities in cases where relatively large numbers of people are thrown out of work. Problems can also arise, however, in cases of sudden and very large increases in demand for labour. As in many cases of down-side adjustment, increased demand for workers is frequently accommodated smoothly in large labour markets where the size of the expansion may be large in absolute terms but is not large relative to the size of the local labour market.

There have, however, been many cases in Canadian economic history in which sudden increases in the demand for workers have been very large relative to a local economy and even to the national economy (for example, construction of the St. Lawrence Seaway and the James Bay Hydroelectric Development). Over the course of the current decade, the western Canadian economy is likely to be confronted by several such situations. A number of energy-related construction projects are being planned, many in remote areas such as the gas pipeline and a number of tar sands plants. Moreover, it seems likely that the construction of these projects will be accompanied by strong growth in the general demand for labour throughout the region.

We argued in Chapter Four that some increased permanent migration to the western provinces is likely to be required. In the case of temporary construction jobs, permanent mobility is likely to be inefficient for a number of reasons.

- Very large relative wage increases would be required to encourage such permanent mobility.
- Excessive construction of social infrastructure might be required to accommodate a temporary increase in the labour force.

The problem, therefore, focuses on maximum use of the geographically dispersed local labour force, particularly Native people, and the resort to temporary migration of workers from further afield. With respect to the use of Native people on such projects, there are encouraging signs that employers are being more innovative in tapping this source of labour.

- The contractor (Bechtel) of the Cominco Mine on Little Cornwallis Island has entered into an agreement with the Inuit Development Corporation for

providing labour to the mine site. Arrangements are made to fly Inuit workers back and forth from their communities, thereby preserving their way of life.

- At the AMOK development in Saskatchewan, workers are flown in for two weeks and are flown back to their towns for two weeks of leave.
- Mr. Robert Blair, president of Nova, stated in his address to a Native Outreach conference in the spring of 1980 that the energy industry in Alberta is struggling with a very expensive overall turnover rate that sometimes reaches 30 per cent per year. In contrast, Nova's overall turnover rate in 1979 was 14 per cent with a 9 per cent rate for Native employees (78 out of 1,705 employees). Other companies in the sector have had a similar experience, although not always consistent from year to year. The message is clear: a well-developed corporate commitment to Native training and employment can yield labour stability that pays dividends.

Issues related to the temporary mobility of the construction labour force were recently examined by the Construction Mobility Task Force, sponsored by the CEIC. This joint labour-management group noted a number of social, institutional and legal barriers to mobility, including interprovincial differences in licensing and certification requirements and the lack of portability of many union health and pension benefits. It also suggested that the increased prevalence of multi-earner families and the increased availability of unemployment insurance benefits in recent years has reduced the desire and need of workers to move to obtain employment.

The Construction Mobility Task Force noted that the megaprojects were unlikely to have problems in recruiting workers:

These mega projects are successful because manpower planning is an integral part of overall planning. They put into place the kinds of incentives necessary to attract temporary workers. Room and board, transportation to the site, recreational facilities, a return trip home every 60-90 days, and overtime, are the incentives that attract workers to these jobs. For these projects the cost of delays resulting from a shortage of workers exceed by far the additional cost of providing the incentives necessary to attract the skilled people they need.

The task force suggested, however, that megaprojects tend to disrupt the normal pattern of construction in adjacent urban centres. In these cases, temporarily mobile workers must frequently bear the costs of maintaining a second residence while away from home, and where room and board allowances are received they are treated as income and subject to tax. They recommended, therefore, that the federal government seriously con-

sider removing the disincentives caused by current income tax regulations. They also recommended more extensive use of the Canada Manpower Mobility Program to facilitate such mobility and joint efforts by governments, industry and unions to remove or reduce other impediments to construction labour mobility.

We think these recommendations merit serious consideration. There seems to be scope for considerable improvement in the degree of temporary mobility of workers, and the Canada Manpower Mobility Program might be used more extensively than it has been to allow workers in relatively weak labour markets to take advantage of temporary employment opportunities in the West. But notwithstanding the potential for increased temporary mobility, the inherent limits to the productive capacity of the economy must be recognized. Greater government influence might be used, where leverage exists through the regulatory process, to schedule major construction projects so as to reduce strains on labour markets.

Conclusions

Throughout this Report, we have argued that there is significant potential for Canada to increase output, productivity and employment through selective labour market policies to improve labour market adjustment. We have argued for a reorganization and reorientation of the employment service to hasten improvement of the employability and productivity of the hard-to-employ. We have also argued that the functioning of the economy could be improved by selective redirection of demand to markets of labour surplus and by a reorientation of federal training efforts to supply the skills that will be required in the 1980s. Such policies could facilitate adjustment in such a way as to achieve significant increases in output and employment while reducing inflationary pressures. In a very real sense, all labour market policies, not just those discussed in this chapter, are designed to facilitate adjustment and adaptation.

The Task Force has not conducted a detailed analysis of legal, constitutional and institutional impediments to geographical mobility. As the Construction Mobility Task Force noted, significant impediments exist. Governments and the private sector can contribute to a smoother adjustment process by continuing to reduce or eliminate such impediments.

The policies discussed in this chapter are intended to further the process of adaptation, thereby reducing resistance to change. The overall result would benefit all Canadians. We wish to emphasize that fundamental to the process of accommodating change is an appropriate intelligence network with respect to anticipated future demands by sector and by region. Probably most impor-

tant is the development of medium to long term sector scenarios, discussed in Chapter Five.

A very important function of the National Manpower Committees described in Chapter Five would be the development of information necessary to facilitate adjustment. The development of sector scenarios would be one of the key responsibilities of these groups. The importance of this information will vary considerably across different sectors. It will be greatest for those sectors having appreciable demands for high skilled labour and susceptible to great external (e.g., international competitiveness) and internal (e.g., technology) sources of change.

The Task Force wishes to emphasize that the accommodation of adjustment is a collective responsibility. Unfortunately, the costs of adjustment have historically been borne by a subgroup of Canadians — older workers, women, the low skilled, and so on — while the benefits have been widely spread. Compensation programs must, therefore, be designed to ensure that those adversely affected do not bear undue burdens and to ensure that beneficial changes can be accommodated.

Down-side adjustments must be facilitated by a combination of programs providing assistance both to individuals and firms. Assistance to firms should be short term. We suggest that most adjustment assistance should flow through individuals. In this way Canada can avoid to a significant degree the problems that have plagued many European countries — namely, perpetuating senescent industries and firms. Compensation programs should be complemented by appropriate re-employment programs — training, mobility assistance, and so on. The exact design of compensation and re-employment programs will depend on the characteristics of the work force affected — age, sex, location, skill, and so forth. Further research would be required to design the exact details for implementation.

The Task Force believes that the potential exists for creative programs to enable Canada to respond to up-side demand shifts. Where demand increases are substantive and enduring, the emphasis should be on improved infrastructure. Where demand increases are smaller and transitory, programs of temporary spells at the work site with periodic leave to home communities make more sense. Again, the detailed design of an implementation phase will require considerable incremental research.

This chapter has benefitted from the paper by G. Glenday, G. P. Jenkins and J. C. Evans entitled "Worker Adjustment Policies: An Alternative to Protectionism," Canada in a Developing World Economy: Trade or Protection, North-South Institute-World Bank Monograph (forthcoming). The Task Force has relied on the results of microeconomic research of labour market adjustment conducted by the Department of Industry, Trade and Commerce.

Chapter Twelve

Summary and Conclusions

This Report is a first step toward the establishment of an integrated analytical framework for labour market development in the 1980s and the framing of broad policy directions implied by that framework. The intent of the Task Force has been to set out a strategic overview, not to provide a detailed evaluation of individual programs or to recommend specific program changes. In Part I we examined the goals of labour market policy and the economic conditions likely to be faced in the 1980s, and in Part II we proceeded to discuss the broad directions of labour market policies which would be required to achieve these goals in the 1980s.

The main goals for labour market policies are identical to those of social and economic policies generally:

- a high and rising level of employment;
- a reasonable degree of wage and price stability;
- a high rate of growth of output and productivity; and
- a fair and equitable distribution of economic opportunity and income.

These goals were established by successive Canadian governments in the post-war period and are assumed to continue for the 1980s. However, policies to achieve these goals are determined in large part by the economic context in which they operate and thus must change with changing conditions. For this reason, the Task Force first analyzed the evolution of current programs in the context of the problems of the 1960s and 1970s. We then assessed the changes in economic conditions likely to emerge in the 1980s. The most significant changes can be summarized as follows.

- Labour force growth will slow to less than 2 per cent per year. Seventy per cent of the growth will be attributable to increased numbers of adult women, 40 per cent to increased numbers of adult men, and the youth labour force will decline, contributing minus 10 per cent to total growth.

- Because of the aging of the labour force, more adaptation and adjustment will be required on the part of adult workers.
- There will be very sharp increases in the number of Canadians of Native ancestry entering the labour force, particularly in the prairie provinces.
- Demand for workers will be particularly strong in primary industries, non-residential construction, capital goods, communication and information, high technology and business services sectors.
- Increased international competition in standard technology goods industries employing a high proportion of unskilled workers will mean declining employment opportunities for these workers in Canadian industries.
- Relatively static demand for clerical and office workers and for workers in health, education and public administration will mean decreased opportunities for employment of women in these “traditionally female” occupations.
- Strong overall demand for labour in the three western provinces and relatively weak demand in the non-metropolitan labour markets of eastern Canada will create pressures for some further increases in interprovincial migration.
- A significant restructuring of the industrial base of central Canada will necessitate major labour market adjustments.

In sum, over the 1980s we expect relatively strong growth in overall demand. This should be adequate to absorb all of the increase in the domestic labour force over that period and perhaps result in reduced aggregate unemployment levels. However, in the absence of government action, there will be very considerable geographical, industrial and occupational imbalances. If these imbalances are allowed to persist, aggregate employment, output, and productivity growth will be reduced and inflationary pressure increased. Hence, there is a pressing requirement for an active, reoriented labour market policy for the 1980s.

Against the changing economic environment, the Task Force identified five major areas for change in labour market policies.

- The quality of information available to workers and employers should be improved in order to facilitate the better operation of the labour market.
- Policies which operate on the structure of demand for labour will have to be more carefully tailored to create economic development opportunities in labour markets which are in excess supply, while ensuring adequate numbers of workers for those markets in which demand is very strong.
- Training policies should be carefully oriented to meet the emerging needs of the expanding sectors of the economy.
- Increased efforts will be necessary to ensure that adult women, people of Native origin and the disabled are able to participate fully in the productive labour force.
- Finally, in a decade of uncertainty, greater effort will have to be made to improve adjustment mechanisms so that expanding industries have access to the skill and labour which they require, while workers in declining industries and areas do not bear undue costs.

Facilitating the Improved Operation of Labour Markets

A key role of labour market policy is to ensure that the labour market functions freely, with as little frictional unemployment as possible. One of the major ways for governments to achieve this is to ensure adequate information about current conditions and provide long-term intelligence about the future state of the labour market. During the 1980s more attention will have to be paid to this activity.

To meet the urgent need for better labour market intelligence, CEIC should create an intelligence network to draw on the knowledge and capabilities of business, labour and provincial governments. As part of this effort, we suggest that a number of National Industrial Manpower Committees be formed, one for each major sector of the economy, and that these be built upon regional committees to the extent possible. These committees, co-ordinated with broader business-government mechanisms, would develop medium- and long-term sector outlooks and use these in preparing forecasts of labour requirements, identifying potential bottlenecks, and suggesting strategies for alleviating them. On the basis of this work, they should set target levels for skill development by both industry and the training institutions.

A Labour Market Intelligence Service should be established within CEIC to perform the following functions: facilitate the operation of these committees; aggregate data from corporate and government sources; reconcile these data with other macroeconomic evidence and projections; and disseminate this information back to the private sector, provincial governments and other federal departments. The work of the National Industrial Manpower Committees and the proposed Labour Market Intelligence Service would provide the medium- and long-term outlook necessary to facilitate corporate and government training programs to head off labour market imbalances.

The Task Force was impressed with the increased emphasis on and quality of manpower planning activity at the corporate level. The Task Force suggests that the Labour Market Intelligence Service and National Industrial Manpower Committees can contribute to improved planning by the provision of high quality medium-term intelligence.

Availability of better labour market information and intelligence will improve the operation of labour markets. To be effective, however, this information must be widely disseminated. Schools and colleges must have access to the information for guidance purposes; firms must have access to it for strategic and manpower planning; and workers must have access to it in order to make better choices in the labour market.

Traditionally, one of the main functions of the employment service has been to provide workers with information about currently available jobs and to provide suitable candidates to employers seeking workers. The last 20 years have seen a sharp decline in the emphasis placed on this activity. Consequently, at present a very small proportion of workers actually find out about jobs through the employment service and a small fraction of total hiring is made through the service. This decline appears to have come about largely because of deterioration in the quality of service provided to employers. The declining proportion of job orders placed with the service means not only a slower matching of jobs and workers in the labour market as a whole, but also a decline in the ability of CEIC to deliver a wide range of other services to its clients.

To improve the speed with which workers find jobs, the Task Force concludes that CEIC should place greater emphasis on improved current information and referral activities. We consider that it could do this largely within its current budget by using the automated job order system, de-emphasizing registration of workers, and placing more emphasis on the provision of quality light screening services. Unless employers perceive the

employment service of CEIC as useful and list jobs with it, the service can be of no use to workers seeking jobs.

Finally, the employment service should provide intensive services to those persons experiencing the greatest employment difficulties. Among groups experiencing the greatest difficulty finding and maintaining employment, Native peoples, adult women re-entering the labour force, and the disabled are disproportionately represented. Because these groups form a very high percentage of anticipated labour force growth, it is extremely important in terms of both economic efficiency and equity to ensure that they find productive employment. In many cases, special services are required to assist people in finding and maintaining employment. CEIC is currently experimenting with various ways to deliver these services and the Task Force encourages continued experimentation and flexible means of delivery. These services are expensive to provide and more resources will be needed if greater effectiveness is to be achieved.

In sum, the Task Force recommends that significantly increased attention be paid to information and employment services. The first priority is to improve the quality of labour market intelligence. The second priority is to improve the quality and effectiveness of what is now called the placement service. The third priority is improved pre- and post-employment counselling for clients with special needs; this activity would complement changes in training for the disadvantaged, described below. While the first two priorities can be met with existing resources, additional resources will be required to meet the third priority.

Influencing the Structure of Demand for Labour

The federal government pursues a variety of policies primarily designed to influence the structure of demand for labour. Tariffs and quotas affect the industrial composition of demand. Incentives to firms affect both the regional and industrial composition. Wage subsidies and direct employment programs are designed to affect the regional, demographic and skill composition of demand. The main objective of all these policies should be to relieve pressure on markets in excess demand and to increase demand for labour in markets characterized by excess supply. The purpose of shifting the structure of demand in this way is to ease inflationary pressures in overheated labour markets while reducing unemployment and increasing productivity in slack markets. Such policies must be used with care, however, as they tend to slow down the normal market adjustment process. Despite this undesirable effect, the Task Force concludes that these policies have an extremely important

role to play during the 1980s to facilitate the attainment of high employment, moderation of wage inflation and equitable distribution of economic opportunity. To achieve these goals efficiently, some reorientation of current policy will be necessary.

Our analysis indicates that the net employment benefit from the use of demand-side instruments is generally small. We estimate that the average net benefit of "creating" a job with an indirect instrument is on the order of 10 to 15 per cent of the wage bill. However, the magnitude of the benefits achieved is highly contingent upon the characteristics of the particular labour market and on the type of instrument used. In some cases the benefit approaches the total wage bill, while in other cases large net costs ensue from attempts to create employment.

We found that the greatest net benefits come from the creation of stable long-term employment in thin labour markets in non-metropolitan areas characterized by chronic excess supply of labour. On the other hand, very small benefits are likely to occur from the creation of jobs in deep labour markets in metropolitan areas, even when the unemployment rate in these markets is relatively high. The Task Force concludes that the creation of seasonal or highly cyclical jobs in thin labour markets — even when those markets exhibit chronic unemployment — is counterproductive, resulting in net costs to society. Policies which increase the demand for labour in markets already characterized by excess demand also result in net costs to society and these costs are likely to be greater in thin than in deep labour markets.

We also conclude that the net employment benefits derived from indirect job creation measures — i.e., those designed to affect the employment decisions of firms — are highly dependent on the type of instruments utilized and the characteristics of the firms affected. We divided instruments into three major categories: restrictions (tariff and quotas); incentives (cash grants, concessional loans, tax concessions, and so forth); and ownership (public sector enterprises). Analysis of restrictions suggests that the recent reliance on bilateral quotas can be a most costly means of protecting a limited amount of employment. In analyzing alternative incentives, the Task Force suggests that there are many reasons for favouring the use of cash grants. They can be directed at a target group of workers; they can be of value to a high fraction of the universe of firms; and they are not as susceptible to leakage abroad as some other approaches, such as tax concessions.

The Task Force also concludes that an important asymmetry exists between the creation of new jobs and

the maintenance of old ones, especially in the short run. For a given level of assistance, the short run benefits from maintaining old jobs often exceed those from the creation of new jobs. In particular, when economic conditions dictate the closure of a large plant or a major layoff in a thin labour market, a subsidy to facilitate a gradual reduction of operations and an orderly layoff over a period of one to three years may yield very high economic and social benefits. The public sector ownership approach to temporarily maintaining employment has frequently encountered problems. Managers of these firms face considerable problems in attempting to fulfill vaguely defined social and commercial goals at the same time. To avoid these difficulties, the Task Force recommends that the government establish explicit long-term goals for the enterprise at the time of takeover.

In addition to the indirect measures analyzed above, direct measures to influence the location and type of employment will continue to be required in the 1980s. During periods of cyclical downturn, there are significant net benefits from direct short-term programs to improve the social capital base. Community needs can be met and total employment increased through direct job creation programs which fund local projects. Moreover, employment created in this way can be carefully targeted and because projects are of a short-term nature they are easily terminated when demand picks up again. The Task Force concludes that direct job creation through the funding of short-term direct job creation based on community, regional or even national needs is a good method of delivering the degree of fiscal expansion desired by the macroeconomic policy authorities to relieve unemployment arising from cyclical causes.

But short-term job creation programs are inappropriate instruments to reduce unemployment in markets characterized by chronic high unemployment. A comprehensive national development system is needed to provide the framework, support and financing for community-based development in underdeveloped regions and among disadvantaged groups. A global conceptual framework within which institutions, agencies and programs can be situated and linked would permit government and communities to move from short-term and single-function programs to developmental programming with a wider and longer perspective.

At the community level, the developmental approach would mean developing multi-project corporations with capacity to plan and manage long-term programs. The prime community objective would be to solve economic and employment problems by building local capacity.

The support systems needed to encourage such development would deliver needed technical advisory ser-

vices (legal, managerial, administrative, etc.) linked into the overall development approach. Provision would be made to provide relevant existing expertise to comprehensive undertakings across the country on a timely basis. Support for these services would initially come from the national organization, but a self-supporting network based upon cost recovery for services rendered would be a major objective. Finally, a development finance institution should be established to provide grant and loan funds to community development corporations, assessing funding requests according to both developmental and financial criteria.

In addition, chronic unemployment in non-metropolitan labour markets can be relieved through the transfer of public and quasi-public sector jobs from metropolitan labour markets. This can be partially achieved by ensuring that federal activities, where feasible, are relocated to markets with a chronic excess supply of labour and that strong efforts are made to train local people to do these jobs through special training programs. In this way the skill base of the community can be increased, making it more attractive for private industry to move in. Provincial governments should adopt similar programs. Subsidies should also be made available to metropolitan municipal governments to encourage some decentralization of their activities to surrounding thin labour markets with high unemployment.

We note that both of these instruments can be used to develop employment for groups of people experiencing employment difficulties. The tools that are appropriate and useful in the creation of employment in markets in chronic excess supply are equally useful in assisting those with special needs.

In summary, it is a new *mix* of instruments to alter the structure of demand which is required for the 1980s. While the Task Force has no magic answers to eliminate joblessness in markets which chronically suffer from excess supplies of labour, we have attempted to set out a general framework for the development of productive jobs. This strategy implies a decreased reliance on tariffs and quotas, general tax incentives, loan guarantee programs and government operation of declining firms. It implies a more careful selection of the types of firms and industries to be given incentives to locate in thin labour markets and favours the use of employment-related cash grants to provide that incentive.

The strategy requires that short-term direct job creation programs be confined to those markets experiencing sharp increases in unemployment and that comprehensive community-based developmental programs be used in markets experiencing chronically high rates of unemployment. However, community development programs

require time to mature. During this development period, traditional job creation programs in areas of chronic high employment should be phased down.

Finally, we note that it is not possible to eliminate differential rates of unemployment across geographic and industrial labour markets in Canada through job creation by direct or indirect demand measures. Low unemployment and high wages draw workers to markets experiencing excess demand for labour. Conversely, higher unemployment and lower wages in areas of excess labour supply provide the needed, though always unwelcome, incentive for workers to leave and seek jobs in markets experiencing excess demand, and for new employers to set up operations in slow growth areas.

Meeting the Skill Needs of the 1980s

In this report we have assumed that the skill needs of the 1980s will be met through training of Canadians and not through large-scale immigration. Nevertheless, selective immigration is the appropriate way to meet unanticipated and peak skill requirements for which it is not possible to train domestically. Because of the rapid pace of change in the 1980s, the Task Force expects that, over the decade, 200,000 to 250,000 skilled immigrants may be needed to meet changing skill needs and to replace skilled Canadians leaving to take jobs abroad. Adjustments may be required in policy, procedures and resources related to both the domestic and overseas elements of the immigration system to permit prompt and accurate identification of foreign skill requirements and to recruit and process about 20,000 to 25,000 immigrants to meet specific labour market needs.

The main demand for skills at all levels will have to be satisfied through increased and redirected training efforts. Support of training is the main way that the federal government facilitates skill development and thereby directly improves labour productivity. Training is an investment which pays dividends only when it is carefully targeted to meet the requirements for skills. The changing profile of employment growth by industry implies changing occupational skill requirements. The training challenge of the 1980s will be to meet these changing needs.

The Task Force has reached two general conclusions with respect to training. First, the training system at the present time is not fully capable of meeting the demands that will be placed upon it during the 1980s. Because the coming decade will be characterized by a shift of labour demand away from government and personal service-sector skills towards skills needed in the goods and business services sectors, the training system must gear up to produce more of the latter. However, as there are

great uncertainties about precise requirements during the decade, the system must be flexible. Changes are required if the system is to meet projected skill requirements and be capable of responding quickly to unforeseen demands.

The second general conclusion is that the total size of the public contribution to the training system is adequate to meet the needs of the 1980s. Indeed, we conclude that a properly structured system can meet the demands placed on it with a smaller commitment of public resources. However, greater financial involvement of the private sector (both trainees and employers) is required to enhance the flexibility and adaptability of the system.

Resources devoted to short-term, low-level skill development under the Canada Manpower Training Program should be gradually reduced and reallocated to the development of higher-level skills. In labour surplus regions, resources should be redirected from low-level skills training to employment development. In the five eastern provinces and in some parts of Ontario and Manitoba, lack of demand for unskilled and semi-skilled workers is the main problem — not shortages of lower skilled manpower.

Lower skill industrial training is no more effective than low-level institutional training unless it is directed at the provision of skills for which there is a demand. Industrial training under the Canada Manpower Industrial Training Program should be concentrated on the development of skills in short supply, and a greater proportion of CEIC training funds should be directed at training for high skilled jobs and the development and support of improved industry-based training programs for these skills.

For those experiencing difficulty getting onto the first rung of the employment ladder, good job experience is the first requirement. Relatively deep wage subsidies over a two-year period appear to be the best method of facilitating such experience, supplemented by low-level training pertinent to the job. Thus, resources devoted to Basic Training for Skill Development should be sharply reduced and redirected to wage subsidies and related training for disadvantaged workers. Upgrading of job-related academic skills would continue but be linked more closely to jobs rather than being conducted strictly in an institutional setting.

Increased numbers of skilled industrial and construction workers are required throughout the 1980s. Although the number of apprentices in many of the construction trades in the two western provinces has risen sharply in response to increases in demand, the

response of the industrial training system has been inadequate to date, particularly in central Canada. Our examination of the industrial apprenticeship system leads us to the conclusion it is inadequate for those trades employed largely in industries which are both fragmented and highly cyclical. In these industries, an adequate flow of new journeymen/women can only be achieved if training is divorced to a much greater extent from normal production activity. This can be achieved through increased use of off-the-job instruction, more directed instruction in the on-the-job component of training, and increased use of regular production facilities for training during cyclical downturns when it would otherwise be idle. These innovations should be encouraged by appropriate federal and provincial financial incentives.

Our analysis indicates the desirability of increased funding for high skill training in many certified trades in the manufacturing sector. We conclude that these funds should be made available from general revenues rather than from a special levy on employers. Increasing public support for higher skill training while reducing support for post-secondary and lower skill training, will provide a better balance of incentives for appropriate career selection.

Finally, we note that pre-apprenticeship off-the-job training has not been developed nearly as well in Canada as it has in Europe, Australia and the United Kingdom and some states in the United States. Moreover, subsequent apprenticeship programs are not geared to build on the off-the-job training base even where it is available. We conclude that more emphasis on pre-apprenticeship courses could efficiently reduce the amount of on-the-job training required in many trades and could improve access to the trades for a greater number of young men and especially young women. Courses of this nature should be developed at both the college and senior high school level over the next decade and apprenticeship programs should be modified to recognize the value of this training.

At the college level, greater emphasis should be placed on courses to meet the demand for technological skills. Industry should be encouraged to play a much greater role in the design and financing of these courses, facilitated by some form of federal matching of industry grants to colleges and by direct financing of students. In some instances this would replace current seat purchase arrangements under CMTP. For these higher skill courses, the best qualified students should be selected, although special measures will be necessary to ensure that women, Native people, and the disabled receive a reasonable proportion of the training.

At the university level, increased capacity to train highly qualified labour in engineering, scientific disciplines and business should be encouraged. A possible method is thrust funding to facilitate the purchase of equipment and the hiring of staff in expanding disciplines.

In addition to this general reallocation of funds from both the university level and low-level training towards training for the high skill trades and college training for technicians, technologists and para-professionals, reallocation of funding within each level is required to meet changing labour market conditions and to encourage more flexibility. At the post-secondary level, making the institutions much more reliant on student fees, industry grants and research grants would increase flexibility by providing better incentives for the institutions to offer courses which meet labour market requirements. Student finance should, at least in part, also be geared to providing incentives and removing disincentives to enter high demand disciplines. An enlarged and revamped student aid program and encouragement of various forms of cooperative education and work/study programs would achieve this. Increased public funding for higher skills training would increase the incentives to institutions and employers to provide this training and to students to undertake apprenticeship programs.

In sum, the federal government is currently making a large financial contribution to the Canadian training system but its efforts are not well focused or directed. The Task Force has considered the training system as a whole and concludes that the structure of federal incentives to the system must be changed to encourage more flexibility and adaptability. Federal spending should be reallocated from low-level training to wage subsidy/training programs for the disadvantaged and from university training to high skill training. By targeting expenditures better, a net reduction of real federal expenditure on training can be achieved while the effectiveness of the training system as a whole and the access of disadvantaged groups to the system are improved.

Our report does not deal specifically with the issue of flexibility in the use of programs across different provinces and economic regions within those provinces. It is obvious that labour market conditions differ appreciably in different parts of the country. In the past, however, labour market programs and policies have, with few exceptions, been applied in broadly similar fashion across all provinces irrespective of their differing labour market conditions and needs. In general, it is clear that the appropriate mix of labour market policies will be different in different parts of the country. We have discussed the appropriate geographical distribution of

different policies and programs in general terms but have not attempted to devise specific mechanisms to ensure appropriate regional flexibility. A central message of our Report is, however, that particular instruments must be used for the purposes for which they were designed. This means that in markets where labour is in excess supply, much more emphasis should be placed on demand instruments. In markets with excess labour demand, supply instruments should receive greater emphasis.

Productive Employment for Workers with Special Needs

Certain groups contain a disproportionate number of workers who need special assistance to find productive employment or to advance up the job hierarchy, because of systemic discrimination and economic and social patterns which continue to limit their employment opportunities. To ensure truly equal access to jobs, all of these groups — the disabled, youth, older workers, women, Native peoples, etc. — require some additional degree of support to allow them to participate as fully as others in the labour market. Because a very large fraction of total labour force growth in the 1980s will be accounted for by adult women and (especially in the Prairie provinces) by Native peoples, it is critical from the perspective of economic efficiency that special measures be taken to ensure that the full productive potential of these groups is realized.

At the entry or re-entry level, opportunities can be improved through better pre- and post-employment counselling, support services, and wage subsidies to encourage employers to give these people some preference in hiring and employment-related training. At this level, the main problem is securing a regular job. In many ways the best training for a job is a job. Training may complement a job but is not a substitute for it.

To ensure the adoption of progressive employment practices which will increase the access of target group members to entry-level jobs and ensure that “bridges” are available to higher level jobs in the career hierarchy, a greatly strengthened and well-articulated program based on the concept of “affirmative action” should be developed. This program to encourage progress in employment practices should be gradually implemented, in both the public and private sectors, by a new agency with the required business-oriented expertise. Given the urgency and magnitude of the basic objective, this program should, to the extent considered feasible, be supported by appropriate legislative and other compliance mechanisms.

Adjustment and Adaptation

Throughout this Report, we have argued that there is significant potential for Canada to increase output, productivity and employment through selective labour market policies to improve labour market adjustment. We have argued for a reorganization and reorientation of the employment service to hasten improvement of the employability and productivity of the hard-to-employ. We have also argued that the functioning of the economy could be improved by selective redirection of demand to markets of labour surplus and by a reorientation of federal training efforts to supply the skills that will be required in the 1980s. In a very real sense, all these policies are designed to facilitate adjustment and adaptation.

We must emphasize that the accommodation of adjustment is a collective responsibility. Unfortunately, the costs of adjustment have historically been borne by a small group of Canadians while the benefits have been widely spread. Compensation programs must, therefore, be designed to ensure that those affected adversely do not bear undue burdens.

To ensure that beneficial changes can be accommodated, down-side adjustments must be facilitated by a combination of programs providing assistance both to individuals and firms. Assistance payments to firms should be made for a very limited time, just long enough to allow them to adjust in an orderly fashion. We suggest, however, that the majority of adjustment assistance should flow to individuals. The Task Force favours grants both to compensate workers for losses and to facilitate their retraining and relocation. In this way Canada can avoid to a significant degree the problems that have plagued many European countries — namely, perpetuating senescent, unproductive industries and firms. Compensation programs should be complemented by appropriate re-employment programs — training, mobility assistance, and so on. The exact form of compensation and re-employment programs will depend on the characteristics of the work force affected.

The Task Force believes that the potential exists for creative programs to enable Canada to respond to up-side demand shifts. Much more emphasis on programming to facilitate increased employment will be required in the 1980s. Where demand increases are substantive and enduring, the emphasis should be on improved social infrastructure. Where demand increases are expected to be transitory, programs of temporary spells at the work site with periodic leave to home communities make more sense. Again, the detailed design of an implementation phase will require considerable further work.

In this Report we have analyzed the labour market problems likely to be encountered in the 1980s and, on the basis of this analysis, set out some broad directions for changes in labour market policies. To meet the challenges of this uncertain decade, much change is required. The achievement of higher levels of employment, lower levels of inflation, higher labour productivity and a more equitable distribution of economic opportunity will not be easy. It requires the deep and abiding commitment of governments, employers and workers to these goals. Government will have to adopt sound structural policies which facilitate change and adaptation. Colleges and universities will have to be more flexible and imaginative in providing the training required in the 1980s. Employers will have to increase their investment in training and make better use of the rapidly expanding adult female and Native labour force. Workers and unions will have to be more flexible in adapting to change.

This Report represents only a first step in a process of analysis, consultation, program design, legislation, and implementation, the result of which will be a set of labour market policies designed to meet the needs of the 1980s. Our task has been to provide an analytical framework and an assessment of general policy requirements based on an analysis of likely labour market conditions in the 1980s. We have not attempted to assess all existing programs in detail against the objectives for which they were designed. Our directional conclusions are meant to provide a basis for discussion and consultation rather than a precise recipe for change. The process of consultation itself may suggest further options for change. Following consultation, a period of intensive work will be required to design effective programs for the 1980s, and where significant change is required, a phased approach to implementation will undoubtedly prove to be essential.

Appendices

Appendix A

Evaluation of Economic Impacts of Labour Market Intervention

The federal government intervenes in labour markets primarily for reasons based on economic efficiency, i.e., to maximize overall gains, and equity considerations, i.e., to improve distribution of benefits and costs.

All government interventions have both efficiency and equity implications. Hence programs (such as those that we have discussed in this chapter) that are being used primarily to influence the level of output (and indirectly the welfare) of workers have some effect on the distribution of incomes. Conversely, programs that focus on reducing the hardship of some groups (e.g., the target groups we have discussed in Chapter Six) have an impact on the aggregate level of welfare. Whether the labour market interventions are being conducted to improve aggregate welfare or to improve the distribution of income, the quantification of the economic efficiency impacts is most important.

In order to determine the efficiency implications of various supply- and demand-side interventions, appropriate tools are necessary to measure the overall net gains or losses to the economy. One possibility would be to utilize macroeconomic approaches (probably econometric models). Unfortunately, attacking the problem from the overall aggregate perspective is just not possible today for several reasons:

- Macroeconomic models are not developed to the point where they can provide adequate disaggregation by skill categories and by regions.
- The data requirements and the computational difficulties to conduct the foregoing calculations are astronomical and well beyond present capabilities.
- Even where adequate disaggregation exists, the data utilized are normally historical. It is necessary to reflect future trends in technology, marginal as opposed to average impacts, and so forth.

Consequently, in measuring the net benefits of labour market intervention we must rely primarily on applying the principles of microeconomics. That is, benefits and

costs of individual intervention activities should be examined. However, given the current state of knowledge, the aggregation of the impacts of the separate interventions is not possible. Thus, while the microeconomic approach does not provide the panacea we would like, nevertheless it does provide very useful guidance in individual cases and the Task Force considers it the most appropriate approach for establishing policy and operating guidelines.

Context of an Economic Efficiency Analysis

Any governmental involvement in labour markets — through stimulating demand, altering supply, improving adjustment processes and so forth — represents only a marginal adjustment to the Canadian economy. Hence, the foregoing interventions focus on improving the productive employment of a small subset of the Canadian population. The overall standard of living of Canadians is governed primarily by an array of considerations well beyond the scope of the Task Force investigation — the endowment of resources, the international competitive position, macroeconomic policies, and so forth.

Whether the government is intervening to stimulate labour demand in weak demand areas (e.g., through providing some form of financial assistance to firms), to improve labour supply (e.g., through providing training grants), or to improve the responsiveness of the labour market (e.g., through mobility grants) two fundamental concerns arise.

- Have Canadians in aggregate been made better off? That is, do the total benefits accruing to all Canadians exceed the costs?
- Has the federal government unnecessarily transferred funds to improve the functioning of the labour market?

The answer to the first question involves many issues beyond the scope of the Task Force. In addition to the

differential benefits and costs accruing to labour, some of the other factors that are important include:

- the change in taxation revenues to the Canadian governments;
- the change in foreign exchange earnings; and
- the differences in returns to capital.

Given our focus, however, we concentrate on the changes in the returns to labour. Whether the labour market is influenced directly or indirectly, it is important not to subsidize unnecessarily those activities that would have occurred without government intervention or to provide excessive compensation and windfall gains. This is a matter of considerable public concern.

Earlier we mentioned that our approach would be to quantify the benefits and costs where possible and to articulate separately the distributional or equity concerns. From the perspective of the implications for labour, we are interested in calculating the net gains as a result of the government intervention. These are obtained by determining the value of labour in the new activity and deducting the value of its alternative utilization. Hence, in the next three subsections we will discuss the following valuations.

- The valuation of the output of labour after government expenditures (e.g., training, job creation, and so on). This information represents the gross benefits as a result of influencing labour demand or supply.
- The valuation of forgone activities from the point of view of the individuals affected. Because the decision-making of individual participants in the labour market is being influenced it is most important to understand the perceptions by these individuals of what they are giving up. We will refer to the foregoing as the private opportunity cost of labour.
- The valuation of forgone activities from the point of view of Canadian society. This perspective, which we will refer to as the “social opportunity cost” of labour, will examine the valuation of the forgone activities from a perspective broader than that included in the private opportunity cost. The social social opportunities cost, when deducted from a valuation of the output of labour, yields an appropriate indication of the differential impact of the labour market intervention on Canadians.

Valuation of the Product of Labour

The determination of the value of the output for labour is complicated by the fact that in the vast majority of cases it is impossible to obtain direct measures. The

foregoing difficulty arises because in general the demand for labour is a derived demand. Only in a minority of circumstances today is labour hired for its direct services.

Consider the case where a homeowner decides to paint his house. He purchases the paint and then hires a painter at a mutually acceptable fee to apply it. Since the fee (or wage) represents the value of the painter's services to the homeowner, it provides a very direct measurement of the value of his output. For the subset of employment circumstances that are similar in nature to the foregoing the valuation of output is a wage that can be readily measured.

In contrast to the foregoing example consider the decision of the paint manufacturer to hire an incremental worker. As a result of this hiring decision the firm most likely would expect its production of paint to increase, with the value of this additional product being determined by the price various customers (including our homeowner) are willing to pay. The expansion of paint production, however, involves many considerations. The firm must obtain an adequate return on its incremental investment in plant and equipment; it must cover the increased selling and administrative expenses; it must pay the incremental utilities required; and it must cover the additional materials needed for production. Thus the determination of the value of output from the incremental labour involves many interrelated issues.

However, we suggest that the most appropriate measure for the incremental value of labour that is indirectly involved in increasing output is again the wage. If the firm were paying the worker more than his incremental output was worth this would not be a rational decision. If it were paying the worker less and hence making abnormal profits on his contribution to output then it would be logical for the firm to increase production to the point where the value of the extra output was just sufficient to pay the worker's incremental wage.

To obtain the valuation of the worker's incremental output from society's point of view, however, requires the consideration of some factors that were not incorporated in the decision of the firm to hire the worker. The firm's decision regarding the value of its output was based on the price it received for its product when it sold the paint to a wholesaler or retailer. The value of the paint to the customer, however, is the price that he is willing to pay for it.

To illustrate the difference in valuing the paint (and indirectly the labour involved in producing it) from society's as opposed to the firm's viewpoint, let us assume that the government levies a sales tax of 10 per cent on the product. Thus the purchaser of the product

by his decision to buy is saying that the product is worth 10 per cent more than the firm received for it. In addition, all of the inputs including that of labour are worth more than the firm estimated. Hence, in this example the wage underestimates the value of the product of labour and should be adjusted upwards to reflect the true social value.

To illustrate another common necessary adjustment to the wage bill, let us assume that our firm exports all of its paint production. In contrast to the previous sales tax example, there is no direct measure of what Canadians are willing to pay for the product and thus we must rely on an indirect indicator. A combination of two results follow from exporting the additional paint.

- Canadians import more products. Since on average they are purchasing these imports over a tariff barrier, the value of the paint must be increased to reflect the fact that Canadians are willing to purchase imports at a price that includes a tariff.
- Canadians export less of other products. Since Canadian exports are heavily weighted in products that are highly subsidized (e.g., agricultural produce) then the exports of paint are again worth more than the firm's selling price.

An analysis of the weighting of the two foregoing effects indicates that the premium for additional exports is approximately 13 per cent of the selling value (Jenkins, 1976).

In summary, the Task Force suggests that the wage (i.e., gross of tax) is an appropriate starting point for valuing the marginal product of labour. Where the labour is utilized to produce goods where either the sales taxes or the percentage of product exported is significantly different from the norm then either an upward or downward adjustment in the wage is necessary to reflect the true incremental values of the labour output.

The Private Opportunity Cost

The betterment resulting from government intervention in labour markets is determined by deducting from the value of output in the new activity, the valuation of the alternative(s) forgone. We begin by, first of all, determining the value of the alternative(s) from the point of view of the individual worker (referred to as the private opportunity cost of labour). Subsequently, we will examine the alternative(s) from the point of view of Canadian society (referred to as the social opportunity cost of labour).

The private opportunity cost concept can be considered from both a *static* (i.e., determining the initial impact) and *dynamic* (i.e., determining the impact over

time) perspective. From a static perspective, the creation of an employment opportunity can result in its being filled in one of three ways.

- A worker enters the labour force (i.e., the participation rate increases).
- A worker moves from another employer.
- A worker moves from the unemployed pool to accept the job.

In determining the gains from the worker's perspective the Task Force adopts the view that basically workers change the state of their employment for modest gains. We know that because the worker accepts a job, he must consider himself to be somewhat better off. In our opinion, however, he is rarely appreciably better off. Later we will discuss some exceptions where this perspective does not apply.

Static Perspective

Let us consider from a static perspective the initial gains when a worker is hired in each of the three ways described previously. For the new participant the gains are likely to be quite small. After all, this particular employee could have participated in the labour force before and could have become one of those workers in the temporary pool that we described in Chapter Three. For the worker moving from another job, again we would expect his private gains to be modest.

For the worker in the labour force and unemployed, consider, for example, the employment of an individual on unemployment insurance. If he were hired at a particular wage and alternatively was receiving 60 per cent of that wage on UI, he could experience a gain of up to 40 per cent of the wage (note, however, both the wage and the UI payments would have to be corrected to ensure that they were on an after-tax basis). If the worker valued his non-market time highly then he might just be willing to accept the job and hence his gains would be minimal. However, if he placed little value on this non-market time then the gains could be up to 40 per cent of the wage. Thus, the static analysis of the initial impact of job creation would indicate that the individual's private gain was less than 40 per cent.

Dynamic Perspective

The ultimate dynamic effects of employment creation, however, extend much beyond the initial hiring decision and require an understanding of the relationships between labour markets across regions and within regions. Earlier we illustrated that the following characteristics of labour markets were particularly important in under-

standing these dynamic responses. In the following section we will pursue the very important dynamic considerations in greater detail.

Summary

The private opportunity cost of the labour requires the integration of the initial static benefits together with the dynamic responses we have just discussed. It will be recalled that the initial static costs from creating a job were less than 40 per cent of the wage (i.e., they varied from zero to 40 per cent dependent on the assumed value of leisure). If the job were temporary in nature then the migration response would result in re-establishing the unemployment rate (over a period of one to two years) and the temporary employee would be no better off than before the job was created. That is, he would be part of a pool of workers whose likelihood of finding employment is unchanged. Hence, in this case the combined income from the net of tax wage and the net-of-tax UI receipts would be a good estimate of the worker's private opportunity cost.

If the job created were permanent then there is the possibility of some enduring gains. These continuing benefits would exist if the position were filled by a person who was previously employed in the local "temporary sector." However, if the permanent position was filled by an in-migrant from another region then the net gains are probably minimal (i.e., the likelihood of an in-migrant reaping substantive gains would not be great). Similarly, filling a permanent position with a person occupying another permanent position in the local region could be expected to result in minor

benefits. Consequently, while there may be modest gains in the case of a permanent job, the net of tax wage bill provides a good approximation of the private opportunity cost. There are however exceptions to the foregoing conclusion and these will be discussed later.

Migration: The Interdependence of Regional Labour Markets

Any dynamic analysis has to recognize the very extensive internal migration patterns that exist within the country today. We will suggest that these appreciable migration flows result in a significant interdependency between the labour markets in different regions.

In Chapter Two we have already described briefly the internal migration flows. We wish to emphasize here migration as a two-way phenomenon. Data from the late 1960s (Table A-1) illustrates the following effects.

- Migration has had a particularly strong impact in provinces having smaller populations. For example, in a slow growth area such as the province of Newfoundland, over 5 per cent of the population left each year. The in-migration was also very substantial, with the equivalent of approximately 3 per cent of the population migrating into the province from other provinces.
- Even in Ontario and Quebec, which have large populations, the migration flows have been significant in terms of numbers. In Quebec, despite strong cultural and language barriers to movements, slightly greater than 1 per cent of the population left each year and the in-migrants amounted to close to 1 per cent.

Table A-1

Gross In- and Out-Migration as Percentage of Population, by Province, 1968-69 and 1969-70

	1968-69			1969-70		
	Out-migration	In-migration	Net migration	Out-migration	In-migration	Net migration
	(per cent)					
Newfoundland	5.42	2.81	-2.61	5.05	3.36	-1.69
Prince Edward Island	5.68	3.73	-1.95	4.07	4.85	+0.78
Nova Scotia	2.84	3.37	+0.53	2.98	3.55	+0.57
New Brunswick	4.34	2.68	-1.66	3.09	2.92	-0.17
Quebec	1.17	0.83	-0.34	1.12	0.65	-0.47
Ontario	1.22	1.44	+0.22	1.13	1.25	+0.12
Manitoba	4.44	2.77	-1.67	3.28	3.02	-0.26
Saskatchewan	5.80	2.50	-3.30	5.18	3.28	-2.90
Alberta	3.79	4.42	+0.63	3.25	3.44	+0.19
British Columbia	2.16	4.09	+1.93	2.09	3.69	+1.60

Source: E. Kenneth Grant and John Vanderkamp, *The Economic Causes and Effects of Migration: Canada, 1965-71*, Economic Council of Canada, 1976, p. 27.

Data from the 1970s confirm the continuing importance of migration flows. The net effects of migration varied from a net out-migration of 0.72 per cent of the population for the province of Saskatchewan to a net in-migration of 0.98 per cent for the province of Alberta.

The extent of internal migration is emphasized when sub-provincial data is analyzed. Taxation return information examined by the Economic Council illustrates that the annual mobility rates were around two per cent (i.e., about 2 per cent of the tax-paying population changed province each year). As the geographic area is decreased the mobility rates increased (Table A-2).

Table A-2

Overall Mobility Rates, 1968-71 (per cent per year)

	1968-69	1969-70	1970-71
Mailing province	2.3	2.1	2.0
Mailing region	4.9	4.7	4.6
Mailing locality	7.4	7.0	6.9

Source: E. Kenneth Grant and John Vanderkamp, *The Economic Effects of Migration: Canada, 1965-71*, Economic Council of Canada, 1976, p. 14.

From the foregoing migration data the Task Force draws the following conclusions:

- In spite of the vast distances involved, Canadians respond to different employment opportunities through very high geographic mobility.
- The high internal mobility is particularly important when it is considered that the federal government is intervening at the margin (through supply and demand-side mechanisms, with its labour market policies).
- The responsiveness to migration varies considerably with the attributes of the individual worker (age, education, employment status, and so on).
- While geographic mobility in response to changes in employment opportunities is very appreciable, it is more sluggish than would exist under highly efficient markets.
- Unemployment is concentrated in a subset of the labour market (e.g., about 25 per cent of the work force in Toronto and 33 per cent of the work force in Cape Breton, and so on). We designated this subset to be the "temporary sector." Workers had spells of employment and unemployment with great regularity.
- A subset of the labour force essentially never experiences unemployment. We designated this subset to be the "permanent sector."

Recognizing the migration information above, the Task Force suggests that in a dynamic analysis the interrelationships between labour markets are best explained by the concept of "equilibrating unemployment and wage rates." This concept is based on the evidence that over the medium-to long-term, labour markets in different geographic locations tend to be in equilibrium. All regions will have amenities to which migrants attach value. In regions having more valued amenities (e.g., less congestion, lower commuting time, lower house prices, and so on) workers are willing to accept a lower annual income and, at the same time, consider themselves to be equally well off.

Annual incomes can more appropriately be considered as "remuneration packages." Consider labour force participants weighing employment opportunities in two regions. Workers in the "temporary sector" can anticipate spending a fraction of the time employed and a fraction of the time unemployed in both locations. Hence, their annual remuneration at each location consists of the sum of their net-of-tax wages for the time employed and their net-of-tax unemployment insurance for the time unemployed. If the worker attaches a higher value to the amenities associated with living in one region then he is willing to accept an annual "remuneration package" that is lower than in the alternative region. Thus, in equilibrium, differential unemployment rates (reflecting different expectations of employment) and wage rates exist. Hence the valuation of employment possibilities should be considered against the background of equilibrating unemployment and wage rates.

To illustrate the foregoing concept consider two labour markets between which there is very substantive migration in both directions — Cape Breton Island and Toronto. Assume that an additional demand for labour is placed on Cape Breton. The immediate response would be a reduction in the unemployment rate. As a result of this reduction, the attractiveness of Cape Breton to potential out-migrants and immigrants increases. Hence, the flows are altered to result in a lower net out-migration (or a higher net in-migration) from Cape Breton until the relative unemployment rates are re-established. The comparative attractiveness between the regions is again reflected in the differential net-of-tax wages and unemployment insurance benefits.

Recently the concept of "equilibrating unemployment and wage rates" has been tested in several case studies. These analyses have illustrated that the regional migration response to specific acts of creating or destroying jobs is both large and rapid. Three examples are described below:

First, the construction of the Glace Bay heavy water plant in Cape Breton Island. C.Y. Kuo (1976) examined the sources of supply of construction workers and found that throughout the entire period 1972-75 over 30 per cent of the work force were in-migrants, either from other parts of Nova Scotia or other provinces of Canada. No evidence exists concerning the number of workers on this project from Cape Breton who would have looked for work outside the region if these jobs had not been available. Even if we ignore the impact of job creation on retraining potential out-migrants, the response of in-migration alone is very significant.

Second, from two Cape Breton towns over the period from 1930 to 1965. Wood and Verge (1966) found that of the total of 444 out-migrants from New Waterford during this period, over 50 per cent left between 1954 and 1956 when several coal mines closed. During this period a total loss of 1,072 jobs occurred in the coal industry. Hence, the immediate response of over 220 out-migrants from only one of the small towns in the area again suggests a rapid response of labour migration to the elimination of jobs in specific firm.

Third, the closure and subsequent re-opening of the Canadian International Paper Ltd. sulphite pulp mill in Temiscaming, Quebec (DREE, 1977). When the mill was closed in May 1972, about 540 workers in the mill lost their jobs. At that time, there was a strong expectation in the area that the mill would not remain closed and, in fact, it was re-opened 17 months later in October 1973.

Of the initial 540 workers, 107 either took early retirement or withdrew permanently from the labour force. Of the remaining 433 workers, at least 222 (51 per cent) moved out of the Temiscaming area to find work but returned when the plant re-opened. About 164 workers who had been unemployed for the entire 17-month period were re-employed when the mill re-opened in 1973. Of this group more than half were over 50 years of age, the age group where workers are expected to be the least mobile. Nevertheless, it seems fair to speculate that if these workers had not had a strong expectation of the mill re-opening, some of them, particularly those in the below-50 age brackets, would have moved out. The balance of 47 workers were unwilling to return to work in the mill because they had found better employment opportunities either inside or outside the region.

In addition, following the re-opening of the mill during the period 1973-76, a further expansion involving about 100 new workers took place. Of these new workers who had not previously worked in the mill, 60 per cent migrated directly from outside the Temiscaming region.

Even without imputing the number of other people in the region who had not worked at the pulp mill but who were induced to leave between 1972 and 1973 because of poor employment prospects, the measured response of the outflow of workers from the region as a consequence of this plant closure and the subsequent inflow is impressive, especially since all this movement took place within a period of less than four years.

The Social Opportunity Cost

To determine the value to Canada of incremental job creation we must determine the value of activities forgone from the perspective of Canadian society. This value is defined as the social opportunity cost of labour (SOCL). Deducting the SOCL from the value of labour output yields the net benefits.

To develop the social opportunity cost of labour, let us begin with the private opportunity cost and make appropriate adjustments. It will be recalled that in the medium- to long-run (i.e., after migration had re-established unemployment rates) the private opportunity cost for labour was the net-of-tax wage for a permanent job. In the case of a temporary job, the private opportunity cost was the sum of the net-of-tax wage and the net-of-tax UI payments divided by the fraction of time employed. Consequently, if temporary jobs were created in which the employees worked half-time, then each man-year of employment would require two workers. The private opportunity cost for the job, in this case, would be double that for each individual worker.

In converting from the perspective of the workers (i.e., the private opportunity cost) to that of Canadians in total (i.e., the social opportunity cost) two key adjustments must be made.

- First, while personal income tax is a cost from the individual's point of view it is not a cost from the perspective of the economy. That is, the personal income tax payments represent transfers and are not economic costs. It is the gross-of-tax wage that is important from society's perspective. Thus the private opportunity cost of labour should be increased to reflect taxes forgone as a result of the new opportunity.
- Second, the changes in unemployment insurance compensation should be reflected. If a job results in increasing the UI payments then society is worse off by the amount of this increase. Conversely, if the job results in decreasing UI payments then there is a net gain. Hence, the private opportunity cost should be altered accordingly.

The extent to which society gains or loses as a result of creating new jobs must reflect the following.

- It must reflect the initial as well as the dynamic effects. That is, the total differential effects over time must be evaluated.
- It must reflect the nature of the jobs created—most particularly whether they are expected to yield permanent or intermittent employment. The effects of the creation of temporary jobs (where the worker can be expected to experience periods of unemployment and employment) differ appreciably from those as a result of creating permanent jobs.
- It must reflect the nature of the jobs forgone. The benefits from hiring employees from permanent employment are much less than from hiring from alternative temporary employment.

It can be appreciated that a comprehensive development of all the issues related to the foregoing is extremely complex. At the moment the empirical research has not been completed in Canada to permit a full detailing of the ultimate sourcing of employment and the characteristics of the temporary work force. The research to investigate the characteristics of the unemployed, described earlier in Chapter Three, should, however, be very helpful in the latter context.

To illustrate the implications of the short and long-run benefits or costs of creating jobs and the importance of the nature of employment (i.e., whether it is permanent or temporary), we will consider employment creation in the Sherbrooke region of Quebec. Given the very significant two-way migration between the Sherbrooke and the Montreal regions, our estimates are based on the assumption — consistent with the evidence of equilibrating unemployment rates discussed earlier — that incremental jobs in Sherbrooke will have been sourced ultimately from both labour markets.

Consider first the establishment of a facility that provides permanent employment and assume that a new plant is established in an industry that provides very stable employment over time. A good example would be the establishment of a coal-fired electrical generating station. The creation of the employment opportunities would be expected to result in an initial reduction in the unemployment in the Sherbrooke region. Then, as our earlier evidence suggests, we would expect the out-migration to Montreal to decrease and the in-migration from Montreal to increase. Hence gradually — over a period of about two years — we would expect the original unemployment rate differentials to be re-established.

The net benefits from the employment creation depend on our assumptions regarding the sourcing of the labour when calculating the social opportunity cost of labour. One possible assumption would be that the new

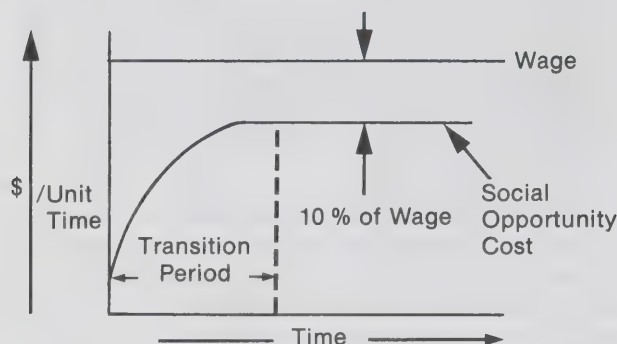
power plant hires personnel in proportion to the sizes of the subsectors of the existing labour markets. This assumption would ultimately lead to most of the employees being hired from Montreal. It would also lead to a high percentage of employees being hired away from other employers that would have provided permanent employment. Much more plausible, in our view, is the assumption that the ultimate effects would have a disproportionate impact on the Sherbrooke labour market. Also we would expect that the hiring would result in an ultimate sourcing that disproportionately affects the temporary sector. That is, a proportion of employees much greater than would be suggested by the comparative size of the temporary sector would be affected by the new employment possibilities.

Fortunately the actual calculations of the social opportunity cost reveal that the outcomes are reasonably “robust.” If in the above example we used the first assumption, then the SOCL would be the wage bill — that is, the gains from employment at our power plant would be nil. The second assumption (disproportionate local and temporary sector sourcing) would yield a social opportunity cost of 90 per cent of the wage. That is, the net gains would be in the order of 10 per cent of the wage. The Sherbrooke results have been corroborated by similar calculations for a project that would create permanent employment for Cape Breton Island (where the primary destination of out-migrants was assumed to be Toronto). Consequently, our analysis would suggest that the long-run gains for permanent employment are in the order of 10 per cent of the wage.

The determination of the social opportunity cost, however, requires a dynamic analysis. The short-run gains from permanent employment can be much greater than those calculated above. The creation of the incremental jobs would result in a temporary reduction in the unemployment rate in the region before the equilibrating forces (to restore the interregional equilibrium in unemployment rates) came into play. Thus, initially, an abnormal amount of employment will come from the local temporary sector. The social opportunity cost of those employees that were initially removed from a state of unemployment would be in the order of zero to 40 per cent of the wage bill (depending on the valuation of non-market time) and the gains would be minimal for those employees bid away from other employers. Similarly the gains for employees transferring immediately from Montreal would also not be great. Thus, the social opportunity cost of labour initially would be based on the short-term sourcing pattern and would be appreciably less than the long-run data previously quoted (i.e., 90 per cent of the wage).

Hence, the social opportunity cost for labour for *permanent employment* creation would gradually (over an adjustment period of about two years) be increased from the initial value described above to the long-run estimate of about 90 per cent of the wage (Figure A-1).

Figure A-1

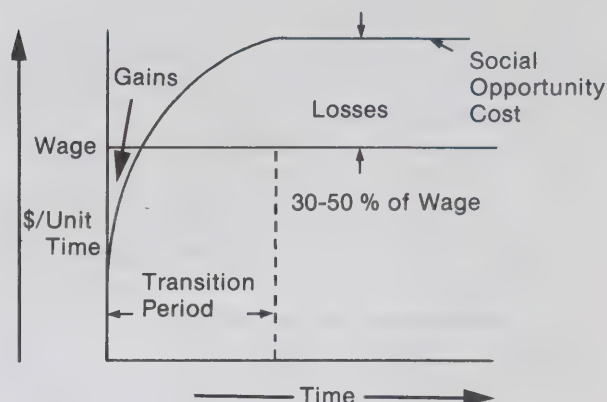


The creation of *temporary employment* differs significantly from the creation of permanent employment. Instead of the stable employment created by the coal-fired generating plant, assume that an automotive parts manufacturer decided to locate in Sherbrooke, Quebec. The automotive industry is cyclical and seasonal and is undergoing rapid technological change. Thus, it would be expected that the workers in the automotive plant would experience intermittent employment.

While creating "temporary" jobs would probably result in initial gains similar to those for permanent employment, the long-run equilibrium would be much less favourable. Each man-year of employment in the parts plant will require more than one employee. Hence, since the size of the (Sherbrooke) temporary sector is increased, UI payments would go up and taxes would be forgone. Our analysis indicates that for the average type of intermittent employment in Sherbrooke, the social opportunity cost per man-year of temporary employment would exceed the wage bill by 30 to 50 per cent (depending on the sourcing assumptions we have described earlier). Hence, the time profile of gains and losses from the temporary Sherbrooke jobs would be as indicated in Figure A-2.

Again our analysis of the creation of temporary jobs in Cape Breton substantiates the foregoing impressions from Sherbrooke. When we considered the average

Figure A-2



Cape Breton temporary sector job (roughly one-half the time spent in unemployment) the costs of creating an incremental job of this nature were about 50 to 70 per cent of the wage.

In summary, while the data will change by region and with the degree of susceptibility to layoffs, our analysis illustrates very clearly that, at least from an economic efficiency perspective, the creation of temporary jobs results in appreciable net economic costs.

Potential Adjustments to Fundamental Model

Up to this point, we have suggested that the before tax wage is the most appropriate starting point for calculating the social opportunity cost of labour. We illustrated that modest gains (in the order of 10 per cent of the wage bill) were characteristic of situations where permanent jobs were created. Losses in the order of 30 to 50 per cent of the wage were typical of those situations where intermittent jobs were created. The foregoing perceptions, however, are not universally applicable. There will be specific cases where the proponents of government involvement in labour markets can prove that the economic gains are much higher. At the other extreme, there will be cases where the losses are appreciably higher than we have estimated. The Task Force suggests that one should begin with the perceptions that were discussed earlier and deviate only when the evidence with respect to a particular case demonstrates clearly that further adjustments are needed. We discuss five such cases below.

First, consider the situation where entry to an occupation is constrained by membership in a union or profes-

sional association (referred to by many economists as the “protected sector” phenomenon). Whenever one finds that a queue of qualified (or potentially qualified with limited training) workers exists for job openings, this suggests that the existing workers can be receiving wages appreciably above the level that is just sufficient to induce them to come. It follows that if output can be expanded beyond current levels then new workers will reap abnormal gains and the social opportunity cost is significantly less than the wage.

A typical example of the above is the creation of incremental jobs in automotive assembly. Automotive assembly does not involve highly skilled trades and the wages are clearly above the level that the workers could command elsewhere. The willingness of workers to forgo wage increases in the recent Chrysler difficulties illustrates the losses that they perceive from the possibility of having to change employment. Hence, if it were possible to increase the output of automobiles, appreciable gains would accrue to workers (i.e., their social opportunity cost is significantly below the wage).

Second, major benefits can accrue when workers have difficulty in participating in the normal labour market. In Chapter Six we have examined the problems experienced by several groups. For these minorities the social opportunity cost can be much less than we have described earlier.

One of the reasons for the federal government taking over Canadair in the mid-1970s was to preserve the employment of the 1,700 workers. Because of the reduction of activity, the work force had decreased from a peak of about 11,000 employees over a number of years. The average age of the company’s labour force (consisting primarily of skilled aerospace workers) was about 55 years. Evidence indicated that alternatively the most likely employment for these older workers (e.g., driving taxis) would result in a major loss in pay. Hence the social opportunity cost was well below the wage and the maintenance of employment resulted in appreciable economic gains.

Third, unfavourable working conditions can make the wage an inappropriate indicator of the social opportunity cost. In our discussion of the “forgone output” argument we have already indicated that the higher wages at remote work sites do not represent gains to the worker but compensation to endure unfavourable circumstances.

While the disadvantages of working in remote locations can be evaluated by workers in advance, there is evidence that other unfavourable aspects of working conditions are not fully taken into account when workers accept certain hazardous jobs. Where working conditions (e.g., in certain types of mining operations) lead to health problems it can be argued that these difficulties were not foreseen and hence not reflected in the wage rates. Thus the social opportunity cost for these hazardous operations would require an upward adjustment of the wage rate.

Fourth, from the perspective of the geographic location of activity, demand creation in slow-growth regions should result in higher benefits for two reasons: the transitional period while unemployment rates are adjusting to a new equilibrium will be higher and the long-run stable benefits will be greater.

Hence, while it was suggested that the net gain from creating permanent jobs was in the order of 10 per cent of the wage, it would be somewhat greater (perhaps up to 25 per cent) in slow-growth regions while it would be somewhat less (perhaps 0-5 per cent) in high-growth regions.

Fifth, the gains to labour from development projects are related to the availability of skills locally. In the case of a slow-growth region the migration response will be delayed significantly if initial hiring can involve a substantive amount of local labour.

The concepts presented here are expanded in a paper prepared for the Task Force by Arnold C. Harberger, entitled “The Social Opportunity Cost of Labour: Problems of Concept and Measurement as Seen from a Canadian Perspective.”

Appendix B

The Levy/Grant Option

Nature of Levy/Grant System

A levy/grant system is one method for the collective financing of investment in certain types of training provided by employers.

A distinction is usually made between training provided by individual employers in skills which are usable only in the firm providing the training (specific training); and training in skills which are transferable between many firms (general training). General or transferable skill training is the concern of a levy/grant system.

The primary objective of a levy/grant system is usually to increase the total level of investment in such training. The levy/grant mechanism seeks to do this by removing all or part of the costs of this training from individual employers and having these costs instead borne by employers collectively. The mechanism operates through the imposition of a levy on firms employing transferable skills and redistribution of funds through grants to those employers who undertake training.

The rationale for the levy/grant mechanism is that a less than optimal level of investment in training for transferable skills occurs because of the high risk to individual employers of securing an adequate return on their investment in such training. This risk is said to arise because of the behaviour of some employers who do not themselves train but instead opt to recruit or “poach” trained workers from the training firms. This “poaching” behaviour of some employers is said to deter other employers from providing training, with the result that the overall level of resources allocated to training is less than adequate to meet the needs of employers generally.

The levy/grant mechanism is intended to combat this type of externality by forcing non-training firms to compensate training firms and thus provide an incentive to the former to undertake training for their own needs and the latter possibly to train beyond their own needs.

The CLC/BCNI Levy/Grant Proposal¹

The introduction of a “national” levy/grant system has been proposed by the CLC/BCNI as a means of ensuring adequate supplies of trades skills and preventing skill shortages. The proposed system would operate through Industry Training Boards established in all industrial sectors where skilled trades shortages are a problem. These boards, administered jointly by labour and management, would be empowered to introduce a compulsory levy on employers and to allocate funds so raised to employers who conduct trades training (both apprenticeship and upgrading) to approved standards, by way of grants which would offset all or part of the firm’s training costs. These Industry Training Boards would also conduct annual assessments of manpower requirements in the skilled trades, but it is not clear how these assessments would be applied in the operation of the proposed levy/grant system.

Under the CLC’s proposal, the various national Industry Training Boards would be established under federal legislation which would also authorize these boards to impose, collect and redistribute monies raised through the levy on employers within each industry sector.

The CLC/BCNI proposal is modelled largely on the early British levy/grant and Industry Training Board system established under the *Industrial Training Act 1964*. Like the early British system, CLC support for the levy/grant mechanism is justified principally by the argument that the poaching behaviour of some employers is a major factor deterring other employers from training; and that the “stick and carrot” approach of levy/grant provides an effective instrument for dealing with the poaching phenomenon.

By equalizing the costs of skill training among all employers, the CLC claims that the proposed levy/grant system would deter employers from poaching, and per-

¹ The following description of this proposal is taken from the CLC Submission to the Special Parliamentary Committee in Employment Opportunities in the 1980s.

suade them to undertake sufficient training to resolve skill shortages. It is also suggested that some employers would be encouraged to undertake training beyond their own needs under the structure of financial incentives established through the levy/grant mechanism.

The following sections consider the British experience with the levy/grant system, and the implications of the British system.

The British Experience with Levy/Grant²

The British levy/grant system and the Industry Training Board system through which it operated, were introduced under the (U.K.) *Industrial Training Act 1964*. The Act had three objectives: to improve the quantity of training, to improve the quality of training, and to distribute the costs of training more equitably between those employers who trained and those who did not. The "objective" of cost reallocation through the levy/grant mechanism, as well as being an equity objective in its own right, was also the means through which the other objectives were pursued.

The main considerations behind the introduction of the 1964 Act, as outlined in a 1962 Government White Paper, were that shortages of skilled labour (particularly in the trades areas) had been a persistent constraint on economic expansion; that shortages arose because some employers (particularly smaller firms) were content to poach those trained in other firms rather than train for their own needs; and that the overall standard of training which was provided was unsatisfactory, again especially in the craft occupations and the engineering (or industrial) trades in particular.

Industry Training Boards (ITBs) were established to collect levies from firms within their scope and return the monies collected, less the boards' administrative expenses, in the form of training grants. The rate of levy (expressed as a percentage of an employer's annual payroll), the occupations, the patterns of training for which the grant was paid, the conditions for receipt and the amounts of the various grants, were all at the discretion of each individual board.

Certain industries and areas of employment (e.g., self-employed persons) were deliberately excluded from the scope of the 1964 Act which covered industries employing around 80 per cent of the total labour force. By 1969 some 27 separate training boards had been established covering industries with around 60 per cent of total employment.

Although the skilled trades occupations were of primary concern to the framers of the 1964 Act, the ITBs concerned themselves with training for a considerably wider range of occupations including management, administrative, clerical, technical and industrial operative occupations.

There was also a considerable range in the rate of levy applied by various boards. Around one-half of all Industry Training Boards levied firms at 1 per cent of payroll or more, the highest rate being 3.8 per cent in civil air transport. Only one board, the important Engineering Industry Training Board covering some 28,000 establishments, surveyed training costs in the industry as a basis for determining its levy rate of 2.5 per cent of payroll. In this industry, gross training costs were estimated at around 4 per cent of the total wage bill and net costs at around 2.9 per cent (excluding estimated productive value of trainees' work). These costs related to training for administrative, technical, clerical, industrial operatives and craft apprentices, the last-mentioned representing nearly 70 per cent of total training costs. (Woodhall, 1974).

In 1973, the British Government formally abandoned the 1964 version of the levy/grant system. Following a review of the operations of the *Industrial Training Act 1964*, the levy/grant system was replaced by a system of levy, grant and exemption under the *Employment and Training Act 1973*. Under this new system, Industry Training Boards were required to exclude small firms from the statutory obligation to pay the levy; to exempt from levy those firms which could show that their training arrangements were adequate to their own needs; and to limit the amount of levy normally to a maximum of 1 per cent of payroll. (The 1973 Act also transferred from industry to the government the responsibility for funding the substantial administrative/operating costs of the Industry Training Boards; and foreshadowed greatly increased public funding of training in industry to supplement the reducing levy income available to the boards from which to finance training grants.) In fact, the levy/grant system had effectively been abandoned before 1973. There had by this time been significant changes to the system in practice, which in turn reflected that the objective of substantial cost redistribution between poaching and training firms had been largely abandoned.

The two main changes were that smaller firms — earlier identified as the main culprits in terms of poaching — had been progressively exempted from the levy requirements and thus removed from the system; and as for those firms remaining in the system, the first official review (in 1972) commented that "Boards have in practice tended to develop their levy/grant schemes in

² The following description of the British levy/grant system is based on the "Training for the Future" (1972) and "Training for Vital Skills" (1976).

such a way that each firm has a fair chance of getting back in grant most of its levy.” Although there continued to be some redistribution of money from firms with a low level of training to those with a high level, poaching firms did not contribute substantially to the cost of training in those firms which did train. Equally, employers who trained beyond the needs of their own business received little compensation for their extra costs from the levy/grant system.

The British levy/grant system was abandoned not because it had already achieved its objective of securing an adequate volume of training in transferable skills, especially craft apprenticeships. After noting that one of the original reasons for the levy/grant mechanism was to increase training of skilled workers and to avoid skill shortage, the 1972 review commented that this aspect of levy/grant schemes had declined in importance. More importantly, the review added “nor is there much evidence that it led to any substantial increase in the number of persons trained in such skills.” A later (1976) assessment of the *Industrial Training Act 1964* by the U.K. Manpower Services Commission went one step further with its conclusion that “the (ITB) system did not succeed in raising the quantity of transferable skill training to the level required to meet the needs of industry generally.”

As shown in Figure B-1 there was, in fact, a downward trend in recruitment to craft apprenticeships, together with marked fluctuations in recruitment which coincided with cyclical movements in the economy.

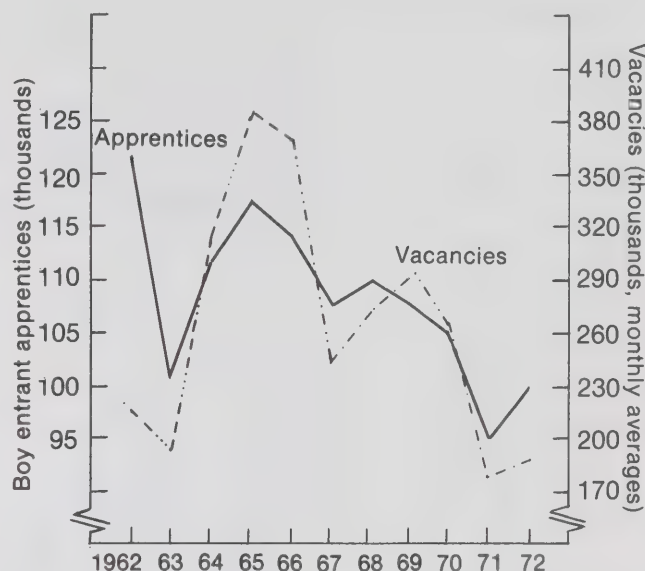
The Manpower Services Commission conceded that the downward trend in recruitment to training for transferable skills (along with a falling ratio of apprentices to skilled workers in some industries) partly reflected reduced requirements for skilled workers due to technological change.

But the report presented evidence showing that over much of the post-war period — including the period after introduction of the *Industrial Training Act 1974* — some of the more economically important skills had continued to be in short supply, either persistently over long periods or at peaks of the economic cycle, or both; and that persistent shortages tended to occur in some regions of the country but not others.

The evidence presented included aggregate measures of demand and supply and data on the experience of individual employers in local labour markets. These were drawn from the U.K. Department of Employment Vacancy and unemployment statistics, manpower research studies of shortages in particular occupations and areas, and other employer surveys conducted by business groups. The main findings were as follows

Figure B-1

Cyclical Variations in Apprentice Intake and Total Notified Vacancies (all industries and services)
Great Britain, 1962 to 1972



Source: “Training for Vital Skills: A Consultative Document,” Manpower Services Commission, London (U.K.), June 1976.

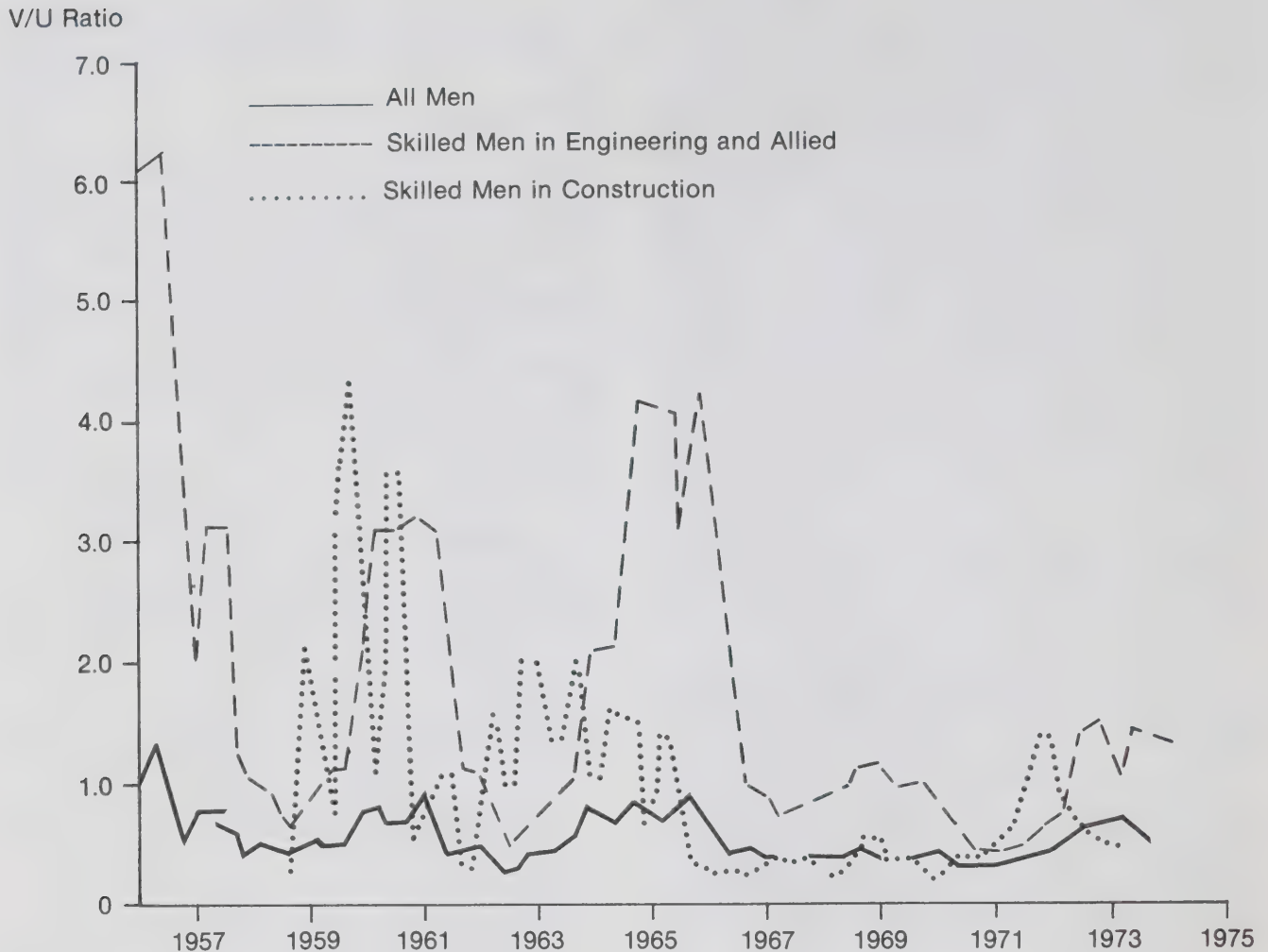
- There was a widening gap between the vacancy/unemployed (V/U) ratio for skilled engineering and construction trades on the one hand, and all male workers on the other, each time the economic cycle moved upwards, and a consistently higher vacancy/unemployed (V/U) ratio for the skilled trades. (Figure B-2).
- Changes in the proportion of firms in the manufacturing industry reporting shortages of skilled labour followed a cyclical pattern similar to that of the vacancy/unemployed ratio for skilled workers. (Figure B-3).
- In some geographical areas many employers continued to report shortages of skilled manpower as a constraint upon production, even when general unemployment was high.

(Also of interest are some of the specific occupations assessed as persistently or cyclically in shortage, since these bear a striking resemblance to the recent Canadian experience. These included press-tool setters, machine tool setters, tool makers, sheet metal workers, engineering draftsmen, production fitters, and turners.)

The report also provided evidence indicating that many factors contributed to the skill shortages

Figure B-2

Vacancy/Unemployment (V/U) Ratios for Skilled Engineering, Skilled Construction and All Male Occupations, Great Britain, 1956 to 1974



Source: "Training for Vital Skills: A Consultative Document," Manpower Services Commission, London (U.K.), June 1976.

experienced by British employers. These included geographic mismatch of demand and supply combined with low worker mobility; inefficient use and deployment of skilled manpower within firms (e.g., their use on semi-skilled repetitive tasks); high rates of wastage from skilled trades occupations in a particular industry, either to another industry or to other occupations, both higher and lower in the skill structure (partly due to pay differentials); and high rates of wastage during training for skilled occupations.

However, the report suggested that the coexistence of the downward trend and cyclical fluctuations in recruit-

ment to training implied that "shortfalls in the provision of training are of great importance."

The levy/grant system was abandoned mainly because in practice its redistributive effects created other inequities even less acceptable to employers than the unequal sharing of training costs. The objective of full cost redistribution through the levy/grant mechanism was abandoned because it became apparent that this approach would exaggerate these inequities and would lead to rising rates of levy as the volume and cost of training increased.

Figure B-3

Percentage of Manufacturing Firms in the CBI'S Survey of Industrial Trends, Reporting Different Factors as Limits on Production, 1960 to 1975



Source: "Training for Vital Skills: A consultative Document," Manpower Services Commission, London (U.K.), June 1976.

The original intention of the levy/grant system was to redistribute funds (i.e., the costs of transferable skill/training) from firms which did no training themselves but relied on recruiting skilled workers trained by others, to those firms which actually did the training. In practice, the system operated in such a way as to also redistribute funds for other reasons.

- Firms within the same industry and which paid the same amount of levy (because their total payroll or employment was identical) recovered greatly differing amounts in grants because differences in the skill mix in their enterprises affected their ability to earn training grants.
- Firms which had low turnover among their skilled staff and hence did little training (because it was

not necessary) recovered little from their levy and saw themselves as subsidizing less well-managed firms which had high turnover, conducted a great deal of training and hence attracted relatively large training grants.

- Highly specialized firms, with training carefully geared to their own requirements, received a low return on their levy (in the form of grants) because their training did not fit the training boards' grant criteria which were geared to common training standards for the industry as a whole.
- Some firms received a high return on their levy because they could arrange "training" activities which satisfied the boards' grant criteria, even though there was no real need for the training. (In

this respect, a system intended to improve allocation of resources to training actually promoted a misallocation of resources.)

The major redistributive effect of the system involved a general transfer of money from small firms to larger firms, partly because small firms had many of the characteristics illustrated above, i.e., low staff turnover, specialized training needs, and difficulties in organizing the forms of training, such as off-the-job training which attracted grants under the system. In the engineering industry, for example, firms with less than 25 employees in 1970/71 received grants equivalent to only 47 per cent of total levies paid while firms with over 5,000 employees received the equivalent of 102 per cent of levies paid.

The 1972 review commented that:

Although some of this effect could be justified as a contribution to larger firms for training craftsmen subsequently employed by small firms, the incidence of this is uneven and does not warrant a general transfer of money away from small firms. (p.57)

These redistributive problems arose because, on the one hand, the levy/grant system removed funds from firms on the basis of their total annual payroll or employment size, and on the other hand, the system returned funds on the basis of the firm's specific training behaviour during the same period. But the extent to which a firm was able to undertake the amount and kind of training required to recover in the form of grant what it had paid out in levy depended on characteristics not necessarily related to the adequacy of its training to its own skill needs (such as the types of skills employed within the firm and the labour turnover rate).

Unless firms within scope to a particular Industry Training Board had a high degree of homogeneity with respect to firm size, skill mix, labour turnover rates, etc., these redistributive problems arose. Various ITBs responded to these problems by shifting from a single levy/grant system for all firms within a particular industry to a range of differential levies (and grant systems) for different sectors and firms within the same industry, thereby adding even further to the administrative complexity of the system.

Implications of the British Experience

The British experience was with a particular form of the levy/grant system. It covered training in many occupational areas as well as the skilled trades (including training specific to firms as well as general training); had objectives related to quality of training which it pursued at the same time as the quantity objectives, and

was organized on an industry basis rather than focusing on specific occupations. Care must therefore be exercised in drawing conclusions from experience with this kind of general system. Nevertheless, the experience would seem to support the following conclusions.

First, the system concentrated on removing the influence of only one factor influencing the total level of investment in training for transferable skills — the poaching behaviour of some employers. The system ignored the effect of other important factors influencing the training investment decisions of employers, particularly the impact of cyclical fluctuations on the level of industry-based training. The levy/grant mechanism does not address the problem of instability in the volume of industry-based training arising from cyclical fluctuations in product demand. To the extent that the provision of training is limited more by the firm's level of production than by the costs of training, the implication is that any instrument based on provision of financial incentives to encourage employers to train will be limited in effectiveness.

Secondly, the British experience illustrates the limitations of the levy/grant mechanism as a means of removing the constraint of investment in training for transferable skills exerted by the poaching behaviour of employers. The difficulty arises because of the problem of establishing a levy/grant system which provides an effective structure of financial incentives to train and which is at the same time equitable in the redistributive effectiveness.

To provide a financial incentive to induce poaching firms to train for their own needs rather than recruit trained workers from elsewhere, the levy/grant mechanism seeks to alter the relative economics of training compared to skill acquisition through outside recruitment. That is, the mechanism aims to alter the costs and benefits of training *versus* outside recruitment by imposing an extra cost — the levy — on firms not undertaking training.

But the additional cost imposed on the non-training firms under the system (i.e., a levy based on total employment or payroll) is a rather clumsy instrument for altering the relative economics of training versus outside recruitment in poaching firms. The costs (and benefits) of training for the same skills vary substantially between firms; and the additional cost of the levy may bear little relationship to the economic advantages which outside recruitment currently represents to poaching firms, compared to the alternative of training to meet its own skill needs. The U.K. experience, where even levy rates of 1 per cent of payroll are still regarded as an "acceptable tax" rather than an incentive to train,

illustrates that substantial additional costs may need to be imposed on some poaching firms to alter the balance in favour of the training alternative for these firms.

Moreover, the system which provides this financial disincentive to poaching (and incentive to training) creates its own problems because of the redistributive effects of the levy/grant mechanism. Just as the levy is a clumsy instrument for providing the financial incentive to train, the grant is (on equity grounds) a clumsy instrument for rewarding training which is undertaken and redistributing funds from poaching firms to training firms.

The two main criteria for assessing the equity of a levy/grant system concern its coverage and its redistributive effects. To be equitable — or at least perceived to be so by employers — the system should have total coverage of users and should be confined to transfers of funds from those employers who do not train for their own needs but recruit those trained in transferable skills, to those firms which do train.

The two options for achieving total coverage of firms in the labour market for transferable skills are an industry-focused or an occupation-focused system. An industry-focused system (such as the British) assumes that the labour market for transferable skills is predominantly national and consists of firms within the same industry. But a characteristic of some of the most critical transferable skills is that they are transferable between many industries, and the labour market for these skills is frequently local or regional rather than national.

An occupationally-focused scheme might therefore seem more suitable, until the practical problem of determining criteria for the inclusion of firms within such a system is considered. For if inclusion were to be simply

on the basis of whether the firm employed persons trained in the transferable skills in question, it would ignore occupational mobility and would discriminate against firms with workers once trained in certain skills but now working in different occupations altogether. Alternative criteria, such as persons employed in particular occupations, would be administratively contentious if not unworkable.

Whether the system is industry-based or occupation-based, problems of unintended redistributive effects would arise to the extent that firms included in the levy/grant system did not have a high degree of homogeneity with respect to: firm size, skill distribution within total employment; costs of training required; and other characteristics such as labour turnover rates which influenced the frequency with which training is undertaken and hence the extent of levy recovery as under the British system.

Finally, it is worth noting that a recent (1980) assessment of the UK levy/grant exemption system (introduced under the 1973 Act) concluded that this system was even less effective in securing adequate volumes of transferable skill training than the earlier levy/grant system which it replaced. The 1980 report commented that “the 1973 Act has on balance impaired flexibility of response to meet the need for transferable skills through its present requirements for ITBS to have levy/exemption systems.” The report suggests that this is in part because levy exemption means reduced levy income available to the board to finance responses to key skill shortage problems. This comment illustrates the extent to which the UK system has departed from its original intention of providing (through the levy/grant and ITB system) a mechanism through which industry would regulate itself to secure an adequate quantity of training.

Appendix C

Additional Considerations Regarding the Adult Occupational Training Act

Current Federal Role: Institutionally-Based Training

The introduction of the new AOT Act in 1966 envisaged that the federal government would buy training for its clients in a market which included competition between provincial and private supplies of training. This buyer/seller principle has never been a reality, however. Provincial institutions are the major suppliers of training, through agreements between the federal and provincial governments and the following calculations of funding.

- Each province receives a minimum guaranteed amount for each year equal to the amount of the previous year's maximum, increased by the rise in the Consumer Price Index as of September 30 of the previous year.
- The additional funds available to the Commission above the minimum guarantees are then allocated as follows: 50 per cent of the funds is distributed on the basis of the previous three-year average in employment growth; 40 per cent of the funds is then distributed to reduce inequities in training funds per capita labour force; and 10 per cent is retained in national headquarters to meet emerging nationally identified training priorities.

As can be seen, only limited funds are available after minimum guarantees are met. Manpower Needs Committees and, in Ontario, Local Industrial Training Advisory Committees (LITACs) have a central role in planning and administering CMTP in the provinces. They are composed of federal and provincial officials but have no employer representatives, except in the case of the LITACs in Ontario. They have a mandate to assess manpower needs in the province, recommend training plans and priorities, evaluate training results and recommend improvements. They are to establish effective mechanisms for consultation with employers, professions, unions and public agencies, and may operate through a number of subcommittees. The effectiveness of the Manpower Needs Committees varies across regions.

In 1979-80, \$214,523,885 (about half of all expenditures on institutional training) was spent on non-apprenticeship skill training for 116,542 full-time trainees, of whom 67.5 per cent were men and 32.5 per cent women; 84.4 per cent of trainees were between 20 and 44 years of age, about half of these being under 25.

The trainees trained in a variety of occupations, with four occupations predominating. As Table C-1 shows, these were in clerical and related occupations; product fabricating, assembly and repair; construction trades; and machining and related. Of the 24 per cent of non-apprenticeship skill trainees trained in clerical and related occupations, 93 per cent were women. Training was heavily concentrated among men in a number of other occupations. In product fabricating, assembling and repair, with 15 per cent of trainees, all but 18.6 per cent were men. In construction trades training, with 10.1 per cent of trainees, and machinery and related occupations, with 10.0 per cent, only 4.3 and 4.8 per cent of trainees respectively were women.

Academic upgrading courses under BTSD (including BJRT and WAT) amounted to some \$83 million (or 19.4 per cent) for full-time purchases and allowances, and 37,459 trainees, representing 21.2 per cent of full-time institutional trainees. This represents about a 5 per cent decrease since 1975-76. Questions arise as to whether the training courses are in occupations in demand; whether the training is provided in labour markets where the skills can be used; and whether the flow of dollars to provincial institutions on the basis of three-year agreements allows sufficient flexibility to meet labour market needs.

Constraints on the Adequacy of Evaluations of the Training System

A number of constraints in the operation of the program which make it difficult to evaluate clearly the extent to which the program is meeting skill needs were discussed in the 1977 evaluation. On a theoretical level the problem appears to be quite straightforward. All that is

Table C-1

CMTP Skill Trainees Started by Sex by Occupation Trained for, 1979-80

Occupation designation by Two-Digit CCDO ¹		1979-80					
		Men		Women		Both sexes	
		No.	Per cent	No.	Per cent	No.	Per cent
11:	Managerial, administrative and related	644	1.65	597	2.17	1,241	1.87
21:	Natural science, engineering and math.	1,665	4.27	447	1.63	2,112	3.18
23:	Social sciences and related	89	0.23	210	0.76	299	0.45
27:	Teaching and related	111	0.28	137	0.50	248	0.37
31:	Medicine and health	338	0.87	2,006	7.31	2,344	3.53
33:	Art., literary, performing arts and related	308	0.79	596	2.17	904	1.36
37:	Sport and recreation	53	0.14	3	0.01	56	0.08
41:	Clerical and related	1,114	2.86	15,088	54.96	16,202	24.38
51:	Sales	450	1.15	472	1.72	922	1.39
61:	Service	2,450	6.28	4,074	14.84	6,524	9.82
71:	Farming, horticulture and animal husbandry	1,311	3.36	366	1.33	1,677	2.52
73:	Fishing, hunting, trapping and related	1,238	3.17	111	0.40	1,349	2.03
75:	Forestry and logging	1,193	3.06	18	0.07	1,211	1.82
77:	Mining, quarrying, oil and gas field	250	0.64	6	0.02	256	0.39
81-82:	Processing	1,544	3.96	498	1.81	2,042	3.07
83:	Machining and related	6,513	16.70	322	1.17	6,835	10.29
85:	Product fabricating, assembling and repair	8,213	21.06	1,846	6.72	10,059	15.14
87:	Construction trades	6,555	16.81	295	1.07	6,850	10.31
91:	Transport equipment operating	3,724	9.55	224	0.82	3,948	5.94
93:	Material-handling and related, N.E.C.	59	0.15	2	0.01	61	0.09
95:	Other crafts and equipment operations	1,173	3.01	134	0.49	1,307	1.97
Total Trainees		38,995	58.69	27,452	41.31	66,447	100.00

¹Canadian Classification and Dictionary of Occupations.

Source: CEIC Training Branch data, 1981.

required is that it be possible to identify those "labour markets" (e.g., occupations) in which there is or will be "need" for a particular type of skilled labour which cannot be accommodated through other less costly supply adjustments. An "ideal" planning system for training assumes, among other things, the existence of labour market indices which are unambiguous and accurate measures of supply and demand; a forecasting methodology which is able to produce timely and accurate estimates of labour market adjustments; and most of all, an adequate theoretical and empirical understanding of how labour markets actually operate.

For the most part these required conditions do not exist at present. For example, most measures of labour market demand are ambiguous in their implications for manpower training. Employment indices simply indicate the stock of persons employed. Vacancy data may also be a misleading indicator. They do not indicate simply an insufficient supply of skilled labour. Vacancies can result from many other, and perhaps more important, causes (e.g., normal job change, low wages, poor working conditions, discrimination and so forth) none of

which necessarily have anything to do with an insufficient supply of skilled labour.

There is probably general agreement that the forecasting of manpower requirements is still in its infancy stage. The COFOR model can provide projections of broad trends at national and provincial levels, but such projections are not likely to be of as much use to planners at the local CEC level. By its very nature, training deals with specific occupations in specific localities and the statistics generated by local manpower officers may still constitute one of the most important sources of information for determining training needs. As well, there is the additional difficulty imposed by current methods of allocating training funds. The small amount of funds available after minimum guarantees are met, and the difficulty of adjusting training requirements to respond to changing labour market demands during the course of the training agreement, both combine to provide an added constraint.

It is equally difficult to measure, let alone forecast, the labour markets where there will be unmet needs for skills, and thus to measure unambiguously what the

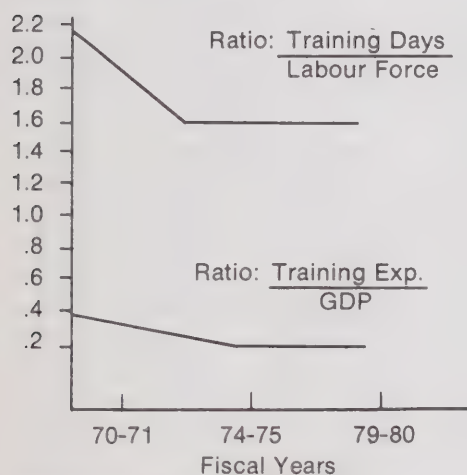
demand for training is. Excess demand can be measured by job vacancy data and excess supply by levels of unemployment. These two measures are not unambiguous, because both conditions may coexist and the reasons for coexistence are important for assessing the potential role of training. Vacancies, for example, may indicate a shortage of skilled people. In this case, training can help to eliminate the structural imbalance either by training the unemployed or by training employed persons and thus opening vacancies which are more closely related to the skills of the unemployed. Alternatively, coexistence may occur because of job turnover. Training will not assist in this case. This issue of information gathering and intelligence was discussed in more detail in Chapter Five.

Background to Adjustments to the Training Program

Three basic trends should be highlighted in discussing the changes made to the training programs following the 1977 evaluation of the programs.

- The stabilization in the closing years of the 1970s of publicly supported training activity relative to the rate of growth in the economy (Figure C-1) was in contrast to the substantial declines which occurred during the first half of the decade.

Figure C-1

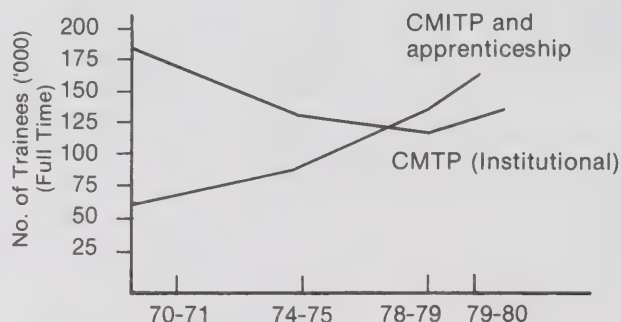


Source: Based on CEIC data.

- The growth in the volume of industrial skill development relative to institutional training (Figure C-2) reflects the need to respond to structural adjustment, imbalances and skill shortages in the economy.
- Reflecting the conditions of generally higher levels of unemployment which prevailed throughout the

1970s, there has been a substantial shift towards the jobless within the institutional training clientele, particularly with respect to two of the groups most severely affected, youths and women. Between 1970 and 1980 the significance of training for the unemployed increased from approximately 50 per cent to 70 per cent. Youth trainees increased from less than 40 per cent to over 50 per cent. Similarly the proportion of women receiving training assistance expanded to reflect the severity of unemployment of the group (46 per cent) within the total unemployed.

Figure C-2
Industrial
Skill Development



Source: Based on CEIC data.

Current Federal Role — Industrial On-the-Job Training

Current federal involvement in on-the-job training is through CEIC's Industrial Training Program (CMITP) and through the Critical Trade Skills Training (CTST) Program.

The overall objective of the Canada Manpower Industrial Training Program is to meet the skill needs of employers and to improve the employability and earning capacity of workers through the expansion and improvement of employer-provided training. The program has five subsidiary goals; to encourage employers to establish new employee training programs and to improve existing ones; to alleviate persistent skill shortages; to prevent the layoff of workers because of technological or other changes; to increase employment opportunities for unemployed workers who lack marketable skills; and to provide an incentive for employers to hire and train special needs clients or to train present employees who meet this definition.

It does this by:

- paying direct costs of off-the-job elements of training, e.g., training aids and instructor salaries, up to 52 weeks; and
- reimbursing trainee wages according to a scale of priorities such that up to 85 per cent of wages may be reimbursed for special needs clients, up to 75 per cent of wages may be reimbursed for women in non-traditional occupations, up to 60 per cent may be reimbursed when the firm provides training for workers who are or will shortly become unemployed, and up to 40 per cent may be reimbursed in the case of trainees already employed in the firm.

In 1979-80, \$100 million was spent on CMITP for on-the-job training, representing about 15 per cent of total training dollars. There has been a slow and gradual increase in industrial training expenditures as a percentage of total training expenditures — from 9.6 per cent in

1975-76 to 15.2 per cent in 1970-80. Most of the training dollars (51.5 per cent) went to employers having one to nine employees. Some 40.2 per cent of the training was for occupations requiring less than one year training. CMITP also provided 39.1 per cent of its training in occupations requiring more than two years training.

Table C-2 indicates the characteristics of the trainees over a four-year period. It should be noted that in 1979-80, 27.4 per cent of industrial trainees were women. This is the same percentage as in 1976-77. A large percentage of trainees (47.8 per cent) were between 19 and 24 years of age and 42.4 per cent were between 25 and 44 years of age. The largest number of trainees had between 10 and 12 years of schooling, although 10.1 per cent had 14 or more years of schooling. Most of this group were employed and received upgrading on-the-job.

Table C-2

CMTP Industrial Training Characteristics Summary by Training Category, 1979-80 (per cent)

Characteristic		Special needs	Unemployed	Employment threatened	Employed	Total
Sex:	Male	70.8	66.7	68.8	78.7	72.6
	Female	29.2	33.3	31.2	21.3	27.4
Age:	19 and under	17.7	23.2	6.3	8.6	15.9
	20-24	31.0	37.9	33.2	26.0	31.9
	25-44	43.1	34.2	42.6	50.3	42.4
	45 and over	8.2	4.7	17.9	15.1	9.8
Marital status:	Single	59.7	61.3	38.5	38.6	50.6
	Married	27.8	32.6	57.0	56.8	43.5
	Other	12.5	6.1	4.5	4.6	5.9
Dependents:	None	68.4	77.5	57.2	54.4	66.0
	One	10.1	8.4	10.3	13.3	10.8
	Two	8.9	6.9	14.6	13.3	10.0
	Three	5.8	4.2	10.6	11.8	7.9
	Four or more	6.8	3.0	7.3	7.2	5.3
Educational level: (years of schooling)	1-7	14.5	6.0	13.2	5.6	6.5
	8	12.3	6.3	6.8	5.2	6.3
	9	14.5	8.4	10.1	7.4	8.5
	10	22.1	17.6	25.6	14.9	16.7
	11	11.2	15.4	11.4	14.6	14.7
	12	17.3	31.2	25.3	34.5	31.6
	13	2.8	6.1	3.3	5.7	5.6
	14 +	5.3	9.0	4.3	12.1	10.1
Labour force status: (Prior to training)	Employed	7.5	6.3	87.7	95.0	47.7
	Unemployed	69.2	81.7	9.8	2.3	43.7
	Not in labour force	23.3	12.0	2.5	2.7	8.6
Total		6,256	37,074	497	39,507	83,334

Source: CEIC *Annual Statistical Bulletin*, 1980.

Table C-3 indicates the occupations for which training was provided under CMITP. Product fabricating, assembly and repair, and processing occupations represented 34.9 per cent of all training; clerical, sales and services occupations represented 21.2 per cent. Training was concentrated in these five occupational areas, and as Table C-4 indicates, female trainees were concentrated in occupations along traditional lines. The occupations where women formed a large percentage of trainees were in medicine and health; clerical and related; service; and teaching and related. There was no change in this pattern from the previous year.

By category of trainee, the employed group was most frequently trained as supervisors and foremen/women.

The dominant occupation for special needs clients was in the construction trades, and was given exclusively to Native clients. Unemployed trainees were most frequently trained in the food, beverage and related processing occupations (see Table C-5).

The high occupational segregation of women is evident in the industrial training program as it was in the institutional training program. Follow-up data will be needed to see if the 75 per cent reimbursement under CMITP for employers hiring women in non-traditional occupations is a sufficient incentive to employers to hire women and to women themselves to take the training.

Table C-3

CMITP Industrial Trainees Started: Per Cent Distribution by Occupation Trained for, 1979-80

Occupational Designation by 2-Digit CCDO ¹	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	N.W.T.	B.C.	Y.T.	Canada
11: Managerial, administrative & related	0.4	0.4	0.9	0.6	4.8	0.8	3.3	1.3	2.3	5.4	1.3	1.4	2.2
21: Natural science, engineering & math.	0.8	2.6	2.0	0.9	2.9	2.2	0.8	3.4	4.6	0.5	1.9	1.1	2.3
23: Social sciences & related	0.1	0.1	0.3	0.2	0.2	0.2	1.5	1.3	0.2	1.8	0.7	—	0.4
25: Religion	—	—	—	—	—	—	—	—	—	—	—	—	—
27: Teaching & related	0.1	0.6	0.3	0.7	0.4	0.3	0.5	1.2	0.4	2.0	0.9	0.6	0.5
31: Medicine & health	0.5	1.3	6.2	3.5	1.0	0.1	4.0	3.2	6.8	—	3.5	—	2.2
33: Art., literary, performing art & related	0.5	0.9	1.1	1.1	1.3	2.0	0.4	2.0	1.3	4.5	1.8	0.6	1.4
37: Sport & recreation	0.5	0.2	0.2	0.2	0.1	0.1	—	—	0.1	1.4	0.2	2.5	0.1
41: Clerical & related	6.4	3.4	5.6	11.4	10.5	7.2	4.4	8.6	7.3	8.2	10.0	10.7	8.5
51: Sales	4.2	3.8	4.9	7.2	11.1	3.4	3.7	4.8	7.2	10.9	6.3	11.2	6.6
61: Service	6.2	8.3	8.8	10.1	3.9	4.4	5.1	10.1	6.7	11.6	8.2	5.9	6.1
71: Farming, horticulture & animal husbandry	1.3	5.4	2.9	1.8	0.5	1.9	3.1	5.6	3.3	0.2	0.7	0.6	1.8
73: Fishing, hunting, trapping & related	—	1.4	0.9	0.1	0.3	—	—	—	—	2.0	0.1	—	0.2
75: Forestry & logging	0.6	0.1	6.9	0.8	1.8	0.7	1.0	1.0	0.2	—	6.3	—	2.2
77: Mining, quarrying, oil & gas field	0.1	—	3.7	0.2	0.3	0.6	5.5	0.7	5.3	6.6	0.8	—	1.3
81-82: Processing	57.2	15.7	14.8	17.2	10.9	9.3	5.8	4.0	9.8	5.2	8.2	0.6	12.4
83: Maching & related	0.7	7.3	6.0	7.8	9.9	17.6	5.8	6.5	5.2	2.3	4.7	2.2	9.3
85: Product fabricating, assembling & repair	8.6	28.5	19.2	16.0	19.1	32.4	26.0	22.8	17.3	13.6	22.5	18.2	22.5
87: Construction trades	2.8	4.6	6.7	6.6	2.0	8.2	3.8	15.3	11.0	12.0	7.4	21.9	6.3
91: Transport equipment operating	3.7	7.8	1.1	2.4	2.4	1.2	0.7	0.7	1.9	3.6	1.3	11.0	1.8
93: Material-handling & related, N.E.C.	2.2	3.2	1.8	1.5	1.6	0.7	0.5	2.3	0.8	—	0.3	1.7	1.1
95: Other crafts & equipment operations	0.6	1.5	1.7	1.9	2.0	3.4	1.0	1.4	3.2	1.6	2.8	2.2	2.4
99: Occupations not elsewhere classified (N.E.C.)	2.5	2.9	4.0	7.8	13.0	3.3	23.1	3.8	5.1	6.6	10.1	7.6	8.4
Total Trainees	4,177	1,049	5,128	5,063	21,122	19,428	4,589	3,001	5,442	441	13,538	356	83,334

¹Canadian Classification and Dictionary of Occupations

Source: Annual Statistical Bulletin, CEIC, 1980.

Table C-4

Industrial Training by Sex and by Occupation Trained for, 1978-79 and 1979-80

Occupational designation by two-digit CCDO ¹	1978-79						1979-80					
	Men		Women		Both Sexes		Men		Women		Both Sexes	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
11: Managerial, administrative & related	1,442	73.9	510	26.1	1,952	100.0	1,263	69.8	547	30.2	1,810	100.0
21: Natural science, engineering & math.	1,513	86.9	228	13.1	1,741	100.0	1,591	84.2	298	15.8	1,889	100.0
23: Social sciences & related	236	55.3	191	44.7	427	100.0	171	52.0	158	48.0	329	100.0
25: Religion	—	—	—	—	—	—	—	—	—	—	—	—
27: Teaching & related	215	47.5	238	52.5	453	100.0	191	46.0	224	54.0	415	100.0
31: Medicine & health	589	26.4	1,643	73.6	2,232	100.0	372	19.9	1,500	80.1	1,872	100.0
33: Art., literary, performing arts & related	546	42.5	740	57.5	1,286	100.0	508	42.1	699	57.9	1,207	100.0
37: Sport & recreation	117	76.5	36	23.5	153	100.0	95	74.8	32	25.2	127	100.0
41: Clerical & related	2,490	32.5	5,178	67.5	7,668	100.0	2,297	32.6	4,756	67.4	7,053	100.0
51: Sales	2,834	62.5	1,697	37.5	4,531	100.0	3,504	63.9	1,977	36.1	5,481	100.0
61: Service	2,216	43.7	2,852	56.3	5,068	100.0	2,048	40.3	3,028	59.7	5,076	100.0
71: Farming, horticulture & animal husbandry	1,209	87.0	180	13.0	1,389	100.0	1,219	87.3	177	12.7	1,396	100.0
73: Fishing, hunting, trapping & related	120	95.2	6	4.8	126	100.0	135	87.1	20	12.9	155	100.0
75: Forestry & logging	2,014	99.0	20	1.0	2,034	100.0	1,806	96.0	76	4.0	1,882	100.0
77: Mining, quarrying, oil & gas field	965	99.5	5	0.5	970	100.0	1,082	99.4	7	0.6	1,089	100.0
81-82: Processing	9,770	78.4	2,691	21.6	12,461	100.0	7,439	71.8	2,919	28.2	10,358	100.0
83: Machining & related	6,460	90.8	653	9.2	7,113	100.0	7,289	94.4	433	5.6	7,722	100.0
85: Product fabricating, assembling & repair	14,269	75.1	4,731	24.9	19,000	100.0	14,748	78.5	4,040	21.5	18,788	100.0
87: Construction trades	5,220	97.6	129	2.4	5,349	100.0	5,142	98.5	78	1.5	5,220	100.0
91: Transport equipment operating	1,371	94.5	80	5.5	1,451	100.0	1,496	96.5	54	3.5	1,550	100.0
93: Material-handling & related, N.E.C.	843	76.3	262	23.7	1,105	100.0	771	81.8	172	18.2	943	100.0
95: Other crafts & equipment operations	1,231	71.0	504	29.0	1,735	100.0	1,470	74.4	505	25.6	1,975	100.0
99: Occupations not elsewhere classified (N.E.C.)	557	80.5	135	19.5	692	100.0	5,863	83.8	1,134	16.2	6,997	100.0
Total trainees	56,227	71.2	22,709	28.8	78,936	100.0	60,500	72.6	22,834	27.4	83,334	100.0

*Canadian Classification and Dictionary of Occupations

Source: Annual Statistical Bulletin, CEIC, 1980.

Table C-5

Most Important Training Occupations Started in 1979-80 by Trainee Category

	Special needs		Unemployed		Employed		All trainees	
	Per cent	ranking	Per cent	ranking	Per cent	ranking	Per cent	ranking
Mechanics and repairers, except electrical	7.5	2	8.7	2	9.0	2	8.8	1
Food, beverage and related processing	4.1	8	10.0	1	4.9	4	7.2	2
Sales, commodities	4.4	6	5.4	4	8.0	3	6.5	3
Occupations not elsewhere specified (supervisors and foremen/women)	0.2	—	0.2	—	11.0	1	5.0	4
Other construction trades	8.4	1	5.2	5	3.7	7	4.8	5
Fabricating, assembling and repairing textile, fur and leather products	6.3	3	7.1	3	1.2	24	4.4	6
Metal shaping and forming, except machining	3.5	10	4.0	7	4.4	6	4.2	7
Metal machining	1.6	18	3.9	8	4.7	5	4.1	8
Food and beverage preparation and related service	5.5	4	4.8	6	2.3	11	3.7	9
Fabricating, assembling, installing and repairing: electrical, electronic and related equipment	2.3	14	3.8	9	2.8	10	3.2	10

Source: CEIC, Evaluation of CMITP, 1981.

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Enquiries and Distribution, Public Affairs Division
Canada Employment and Immigration Commission
140 Promenade du Portage, Ottawa, K1A 0J9
994-6313

Task Force Members

Executive Coordinator: David Dodge

Coordinators:	P.D. Brodhead	Diane MacKay
	Olivia Jacobs	Peter Miles
	Ivo Krupka	Donald Tate

Staff

Research:	Hélène Bellau	Toni Manson
	Serge Bertrand	André Spénard
	Robert Kinnaïrd	Ivan Timonin

Editorial: Ruth Crow

Support:	Suzanne Barthe-Berriault	Anne Granger
	Jean Bizeray	Betty Hammond
	Barbara Chassé	Danielle Ranger
	Cathy Donnelly	

The following people provided research, editorial and support services on a temporary or part-time basis: Michael Decter, Francine DuBois, Josette Duchesne, Tony Falsetto, Susan Fulford, Gillian Godfrey, Robert Haydon, Arthur Joly, Jill Moxley, Huguette Nadeau, Lucien Parizeau, Joseph Petrie, Lise Pronovost, Raymond Robichaud, Barbara Springer, Ken Svenson.

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